

Model TC-131 Tape Controller Logic Manual



western peripherals™

PRODUCTS OF **WESPERCOP**

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Santa Ana, California 92705
(714) 261-0606 • Telex: 4720629 • Cable: WESPER

**MODEL TC-131
TAPE CONTROLLER
LOGIC MANUAL**

Publication Number:

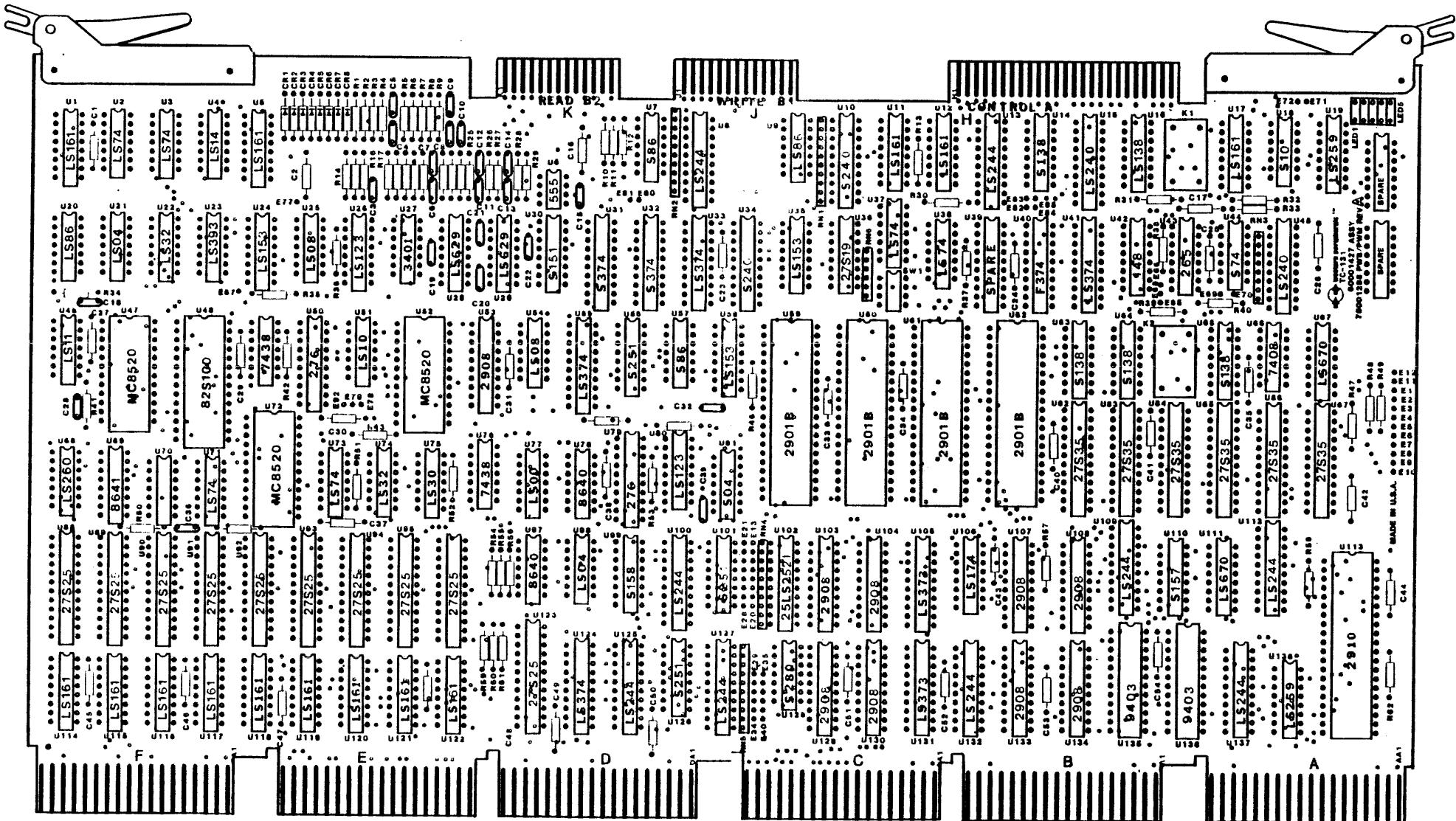
P91000489

Rev. B

Rev. Date 03/20/85

Applicable Assembly Number: P60001427

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8 7 6 5 4 3 2 1

CONTROL A

	H	
SLT6	1	2
SLT7	3	4
SLT5	5	6
SLT4	7	8
SLT3	9	10
SLT0	11	12
SLT1	13	14
SLT2	15	16
FLPT	17	18
WNB	19	20
DWW	21	22
RBL	23	24
EOTP	25	26
KNC	27	28
DSL	29	30
BDTP	31	32
FSL	33	34
+5V	35	36
+5V	37	38
RWS	39	40
TRDY	41	42
ZNL	43	44
	45	46
SPO	47	48
NRZ	49	50

SPEED SETTING

SW POS	125	125	125	125	75	75	75	45	45	325	SEL B
1 C	C	C	C	C	C	C	C	0	0	0	
2 C	C	C	C	C	0	0	0	C	C	0	
3 C	C	C	0	0	C	0	0	C	0	C	
4 C	0	C	0	0	C	0	0	C	C	C	

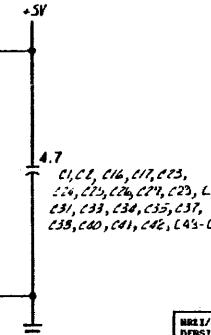
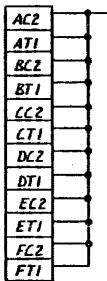
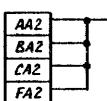
C = ON
0 = OFF

WRITE B1

	J	
WDS	1	2
WDT	3	4
WARS	5	6
WDR	7	8
WDS	9	10
WDT	11	12
WDP	13	14
WDR	15	16
WDS	17	18
WDS	19	20
WDS	21	22
WDS	23	24
WDP	25	26

READ B2

	K	
RDS	1	2
RDS	3	4
RDS	5	6
RDS	7	8
RDS	9	10
RDS	11	12
RDS	13	14
RDS	15	16
RDS	17	18
RDS	19	20
RDS	21	22
RDS	23	24
RDP	25	26



4.7
L1, L2, L16, L17, L23,
L24, L25, L26, L27, L28,
L31, L33, L34, L35, L37,
L38, L40, L41, L42, L43-L54

INSTALLATION OF SELECTION OPTION JUMPERS
FOR DEC/IBM PACKING MODES AND IBM/PE DENSITY MODES:

IBM/PE DENSITY MODE SELECTION OPTIONS:	DEC/IBM PACKING MODE SELECTION OPTIONS:	TC-131 JUMPER REQUIRED:
IBM PACKING MODE SELECTABLE BY SETTING BIT 10 (IBM) IN MTRD REGISTER (STANDARD)	E82 TO E83 E84 TO E85	
PE DENSITY MODE SELECTABLE BY SETTING DENSITY SWITCH ON DRIVE (OPTIONAL)	E83 TO E85 E84 TO E85 E80 TO E81	
IBM PACKING MODE ONLY (OPTIONAL)	E82 TO E83 E84 TO E85 E78 TO E79	
IBM PACKING MODE SELECTABLE BY EXTERNAL SWITCH (OPTIONAL)	E84 TO E85 E84 TO E85 WIRE SWITCH FROM E82 TO E79	
PE DENSITY MODE SELECTABLE BY SETTING BIT 10 (IBM) IN MTRD REGISTER (STANDARD)	E83 TO E85 E82 TO E84	
IBM PACKING MODE ONLY (OPTIONAL)	E82 TO E84 E82 TO E84 E78 TO E79	
IBM PACKING MODE SELECTABLE BY EXTERNAL SWITCH (OPTIONAL)	E83 TO E85 E82 TO E84 WIRE SWITCH FROM E78 TO E19	

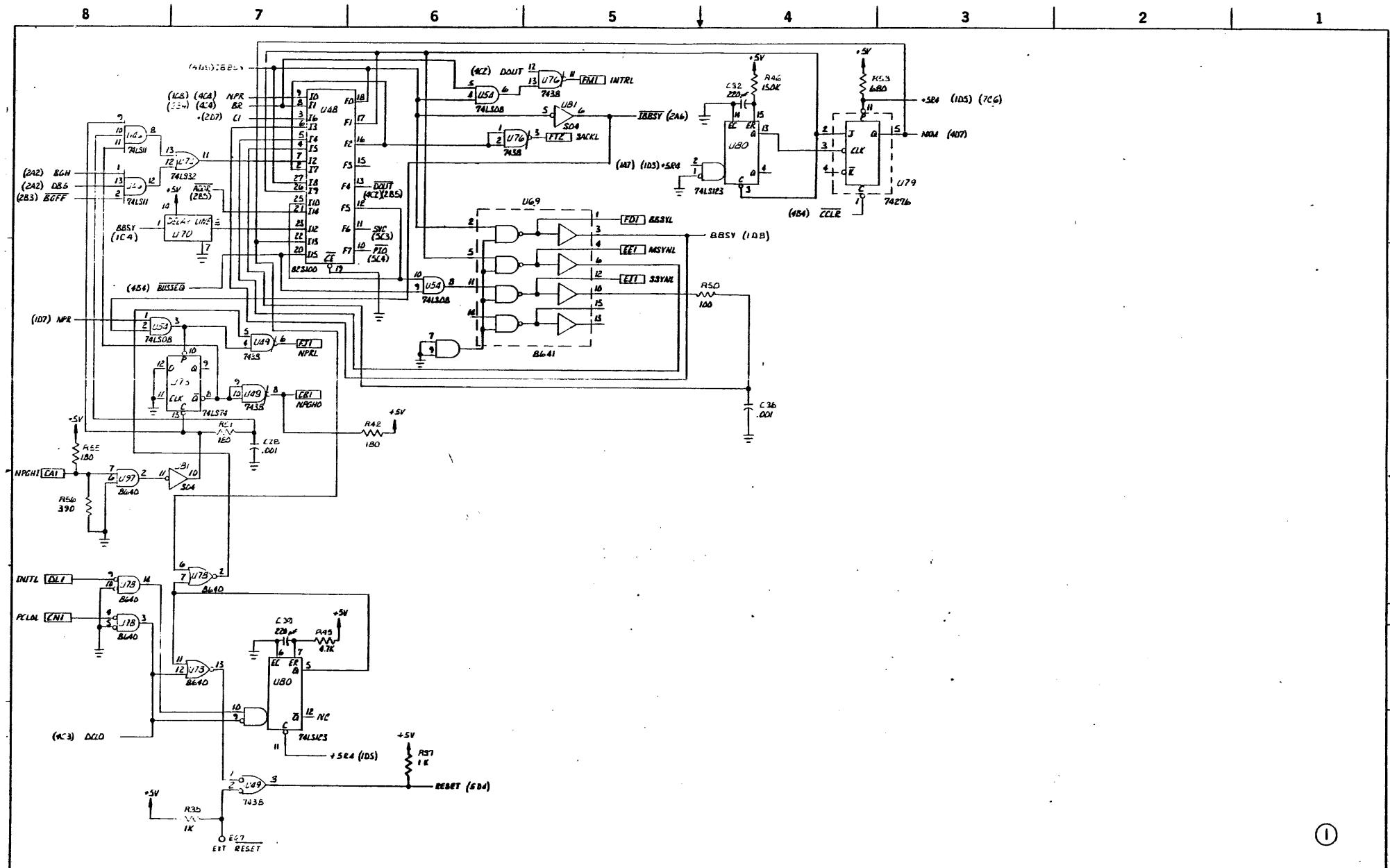
9. REFERENCE ASSY. P60001427
2. CAPACITOR VALUES ARE IN MICROFARADS.
1. RESISTOR VALUES ARE IN OHMS. & ARE 1/4W 5%
NOTES: UNLESS OTHERWISE SPECIFIED.

LAST DESIGNATION USED		
RESISTOR		63
CAPACITOR		54
DIODE		8
LED		5
RESISTOR NETWORK		6
OSCILLATOR		2

SPARES		
LL.LOL.	DESCRIPTION	PIN NO.
	B64A0	9-14
	74LS11	3-6
	74LS32	1-3
	7438	11-13
	74276	
	74SB6	11-13

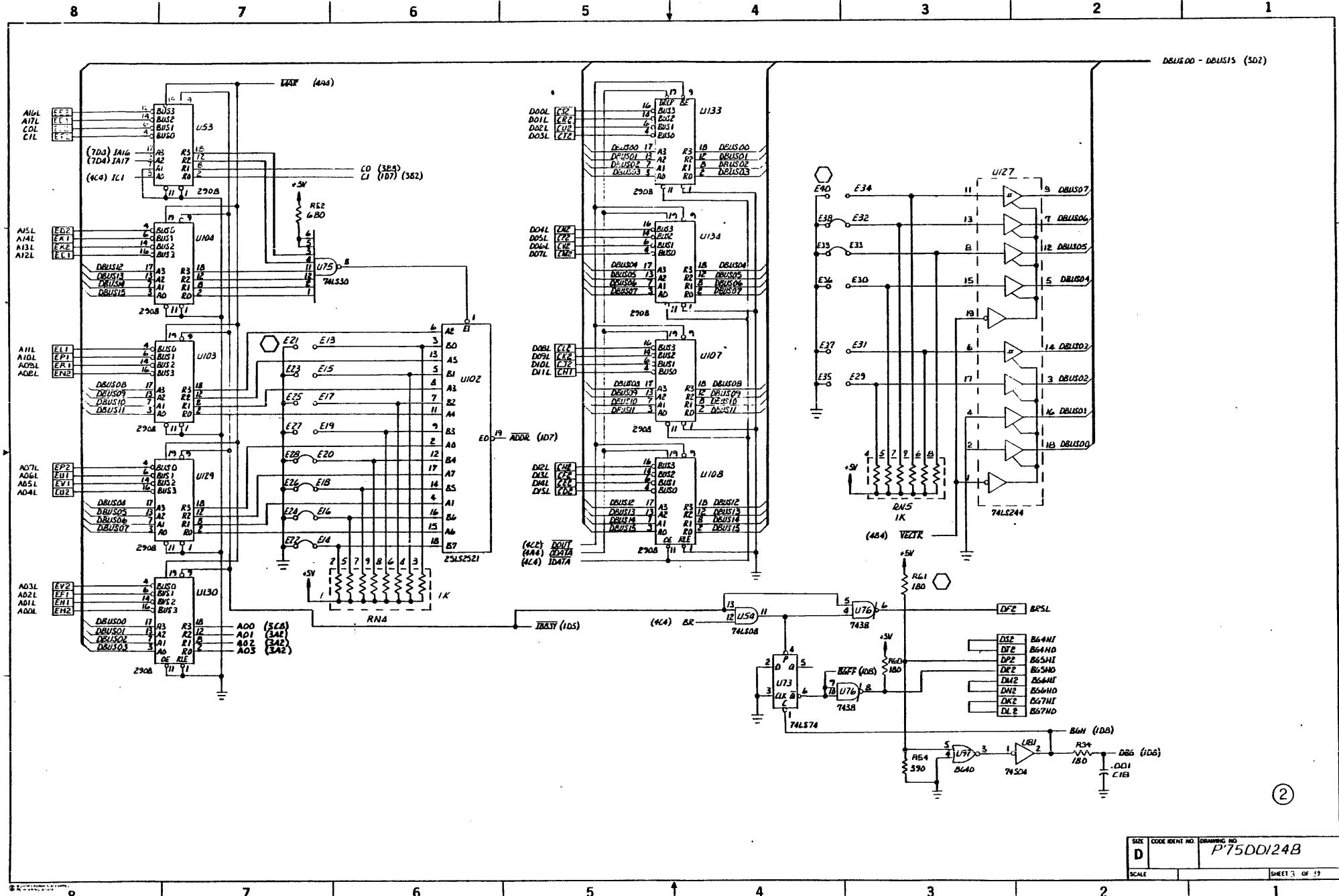
QTY REQD	CODE IDENT	PART OR IDENTIFICATION NO.	MANUFACTURE OR DESCRIPTION												
PARTS LIST															
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE .005 INCHES ANGLES S = XX = XX = XXX =</p> <table border="1"> <tr><td>CONTRACT NO.</td><td></td></tr> <tr><td>APPROVALS</td><td>DATE</td></tr> <tr><td>D.KEANEDY</td><td>7-26-82</td></tr> <tr><td>MAILED</td><td></td></tr> <tr><td>CHECKED</td><td>1/12/82</td></tr> <tr><td>ENGR:</td><td></td></tr> </table>				CONTRACT NO.		APPROVALS	DATE	D.KEANEDY	7-26-82	MAILED		CHECKED	1/12/82	ENGR:	
CONTRACT NO.															
APPROVALS	DATE														
D.KEANEDY	7-26-82														
MAILED															
CHECKED	1/12/82														
ENGR:															
<p>FINISH</p>															
<p>P60001427</p>															
NEXT ASSY	USED ON	APPLICATION	DO NOT SCALE DRAWING												
SIZE CODE IDENT NO. DRAWING NO.															
D P75001248															
SCALE															
SHEET 1 OF 9															

western peripherals™
LOS ANGELES CALIFORNIA
SCHEMATIC DIAGRAM
TC-131 TAPE CONTROLLER



1

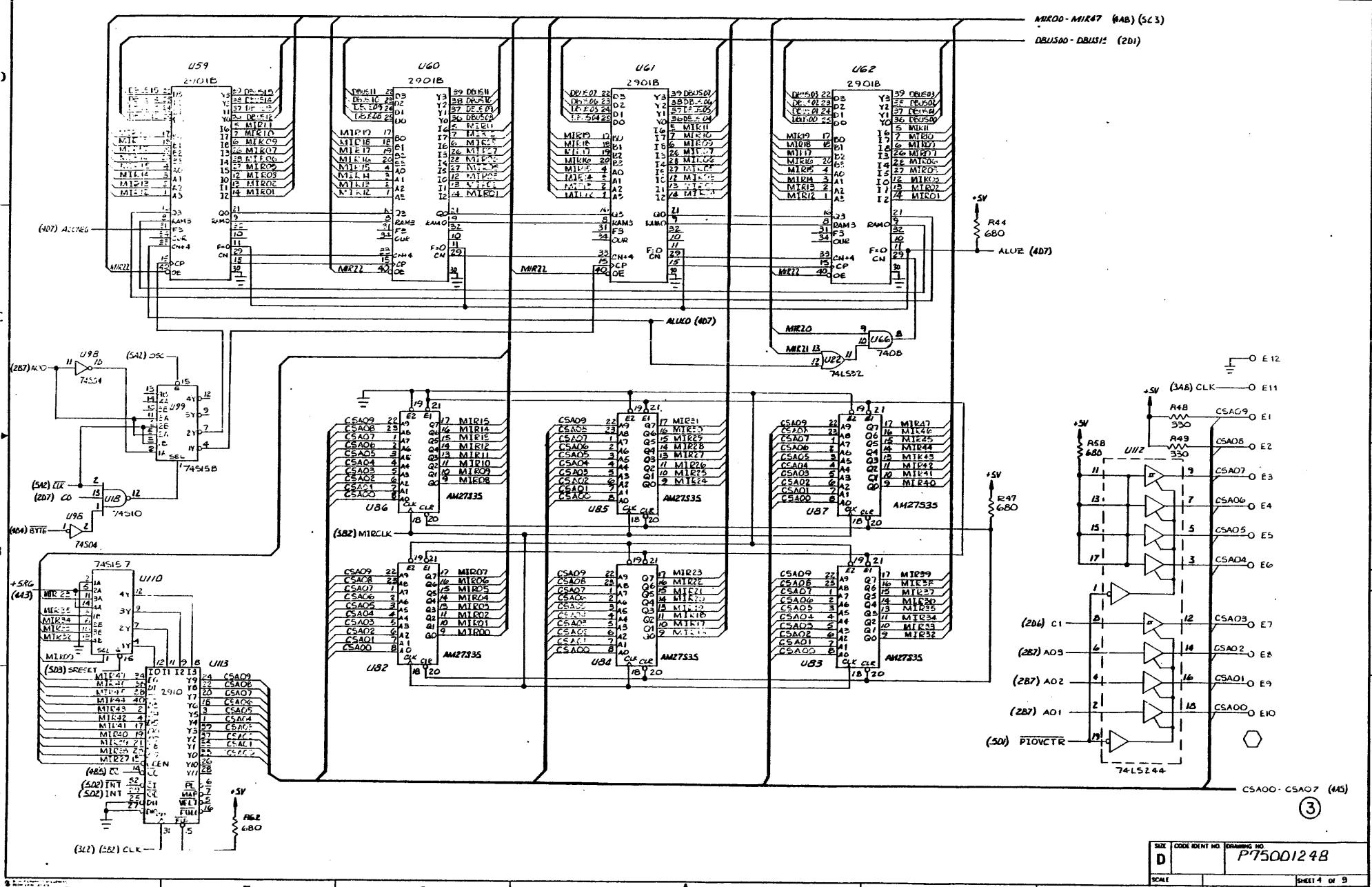
SIZE D	CODE IDENT NO.	DRAWING NO. P75001248
SCALE	SHEET 2 OF 71	

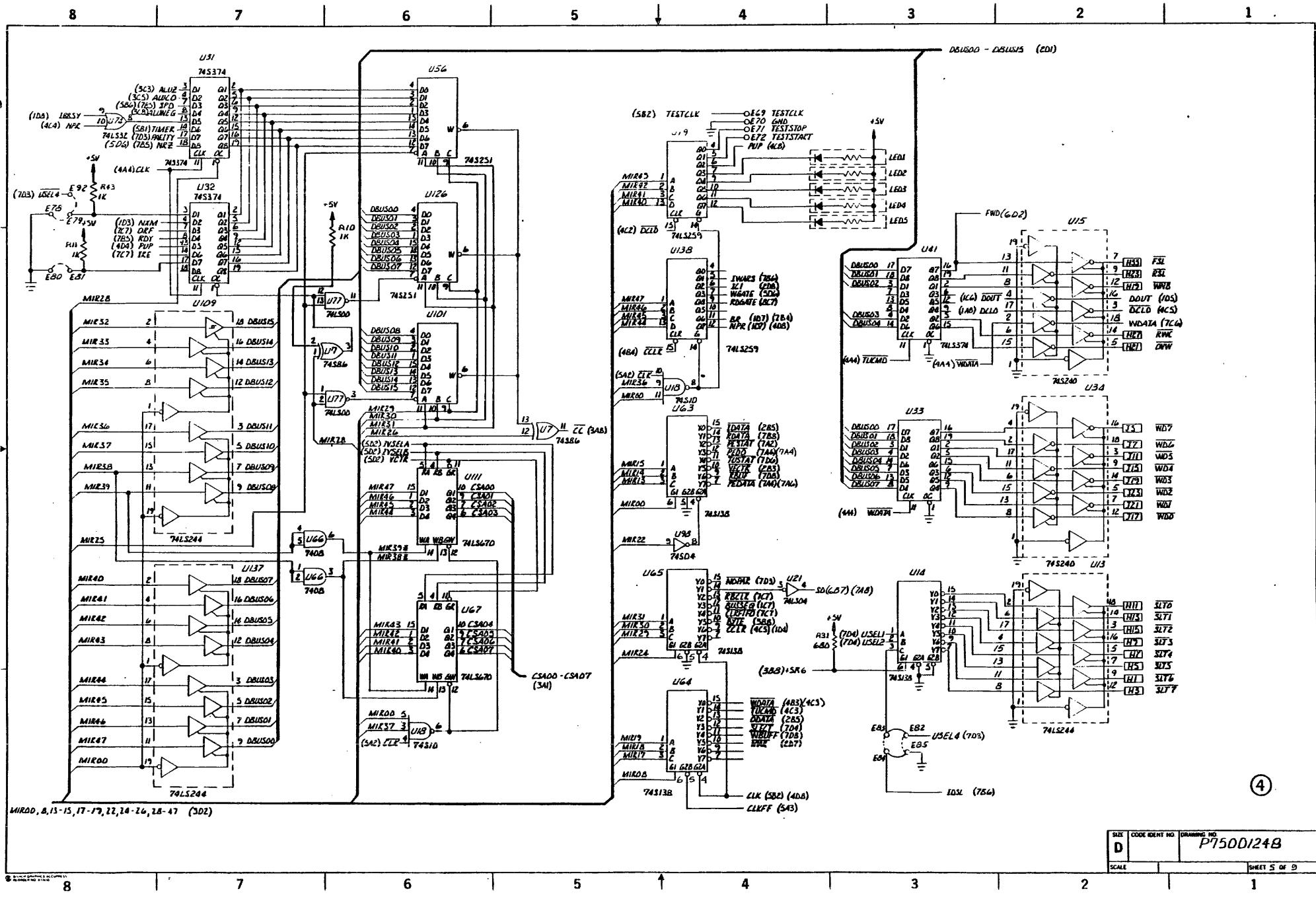


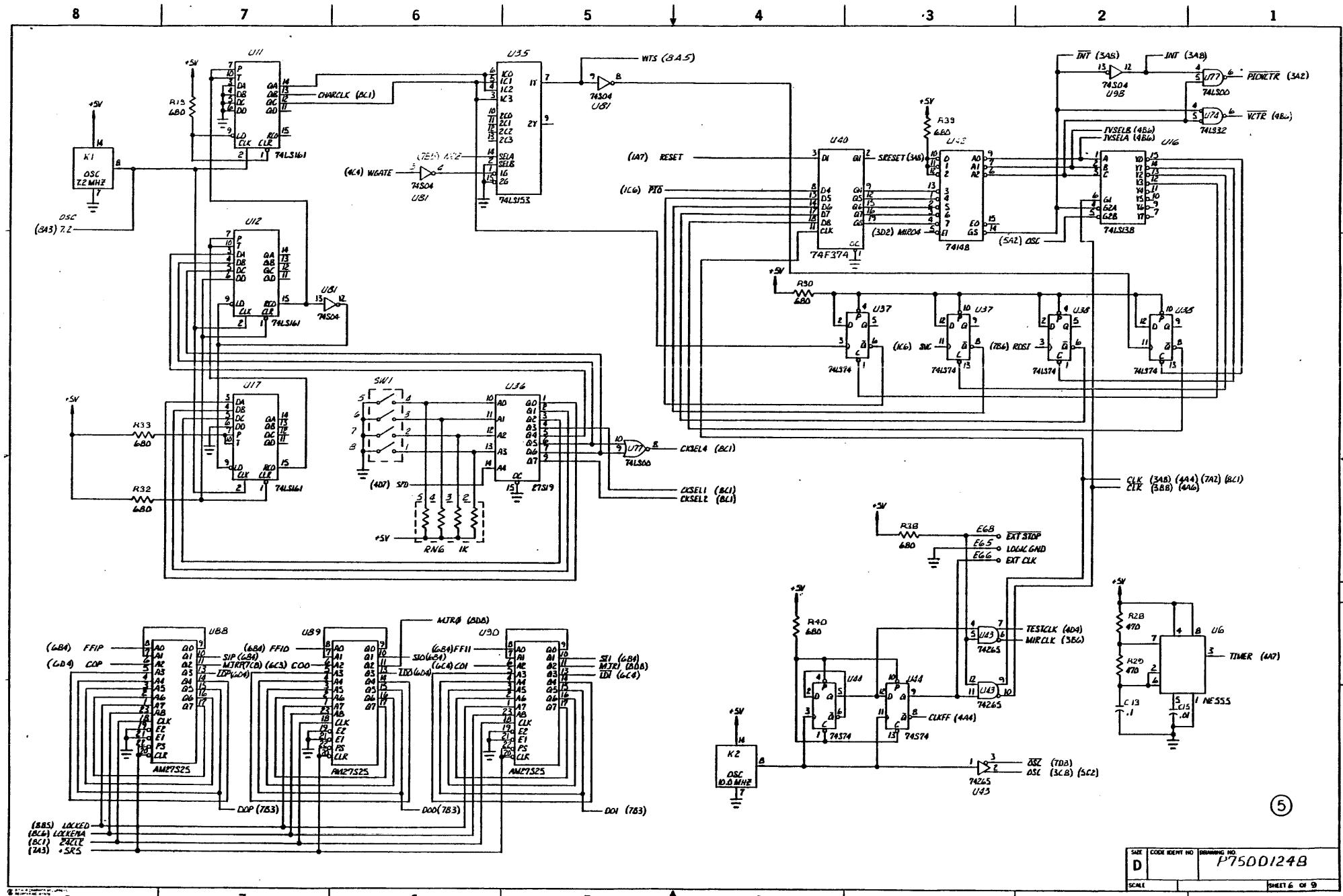
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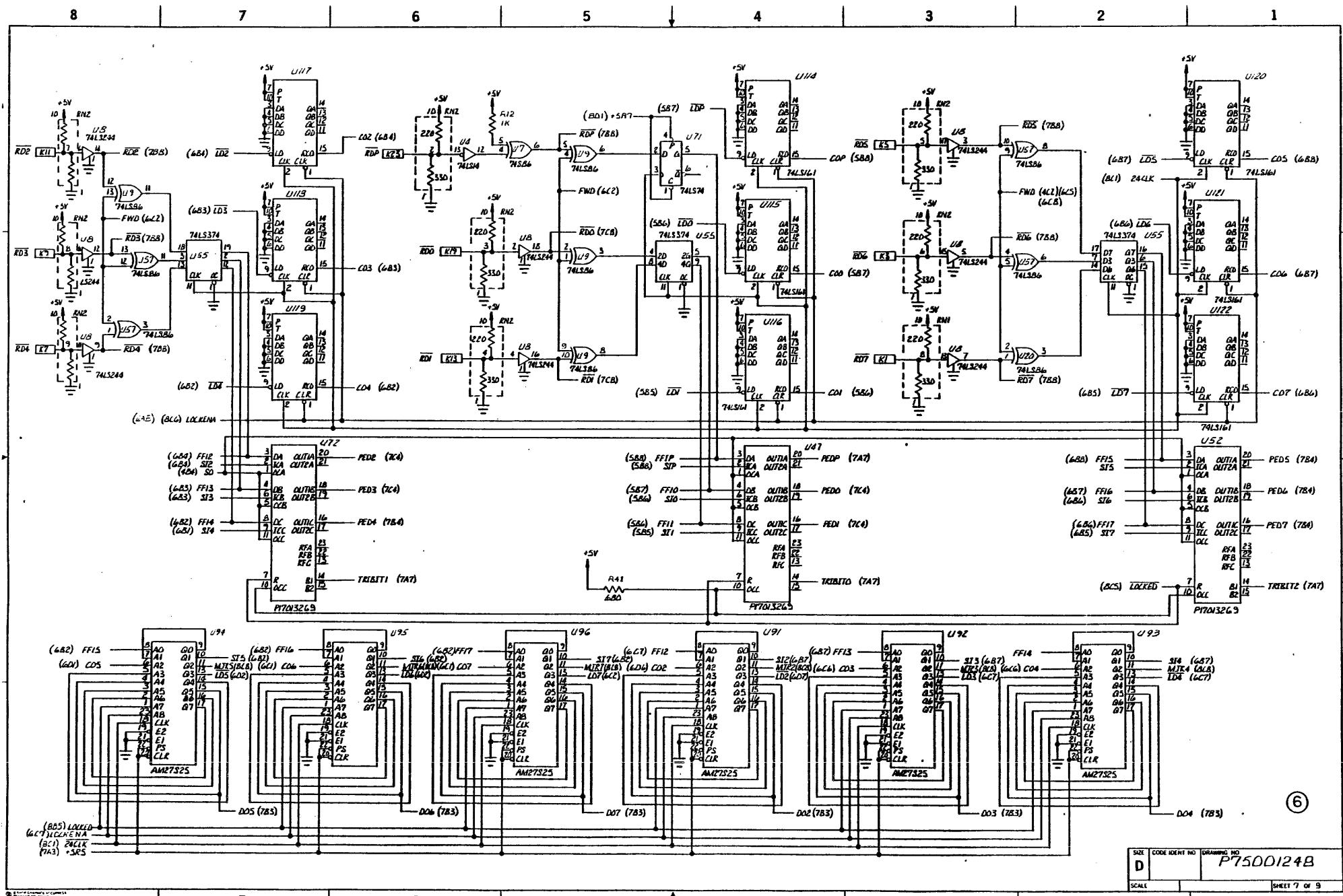
SIZE D	CODE IDENT NO.	DRAWING NO. <i>P75001248</i>
SCALE	SHEET 3 OF 19	

8 | 7 | 6 | 5 | ↓ | 4 | 3 | 2 | 1

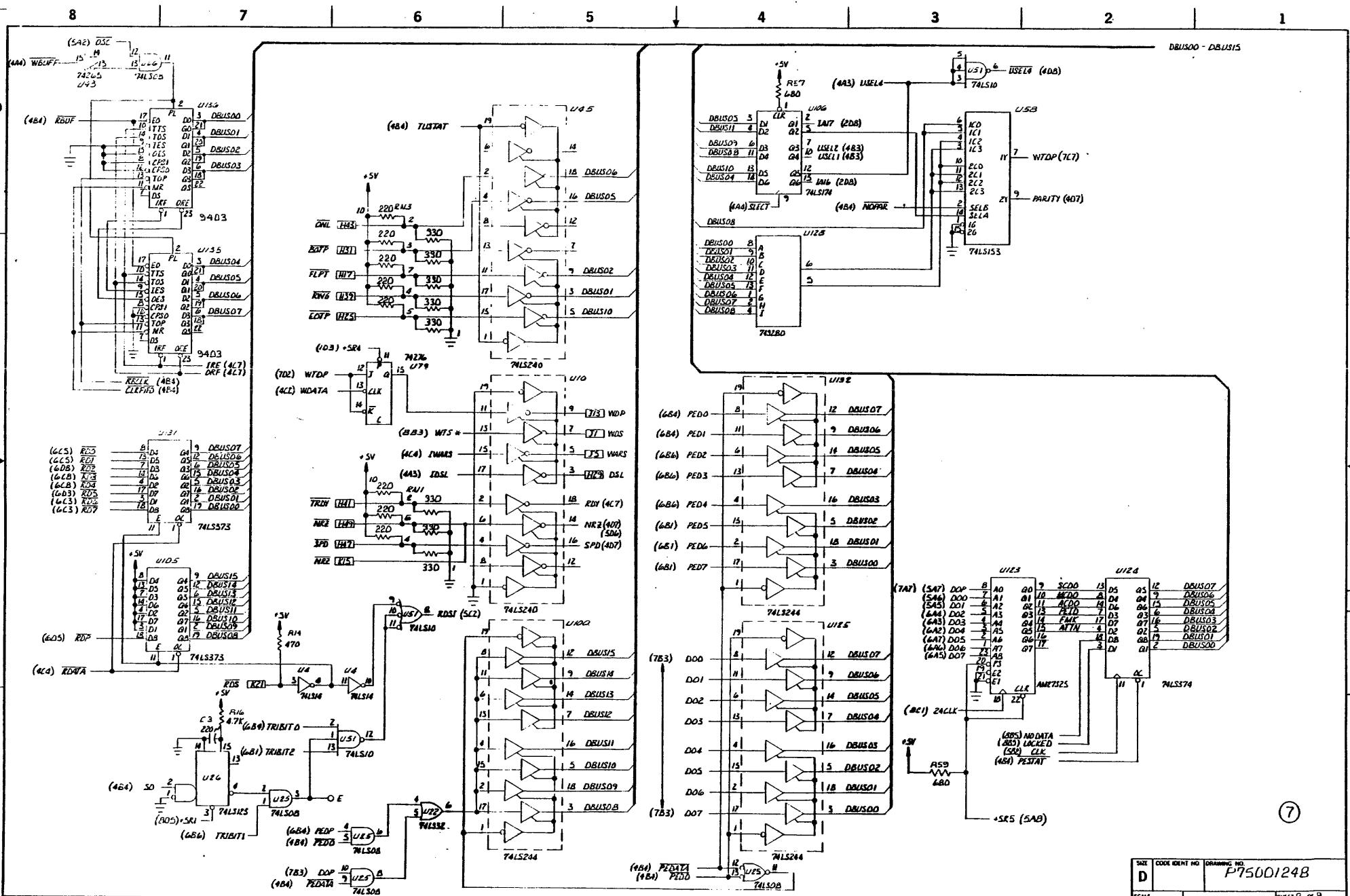


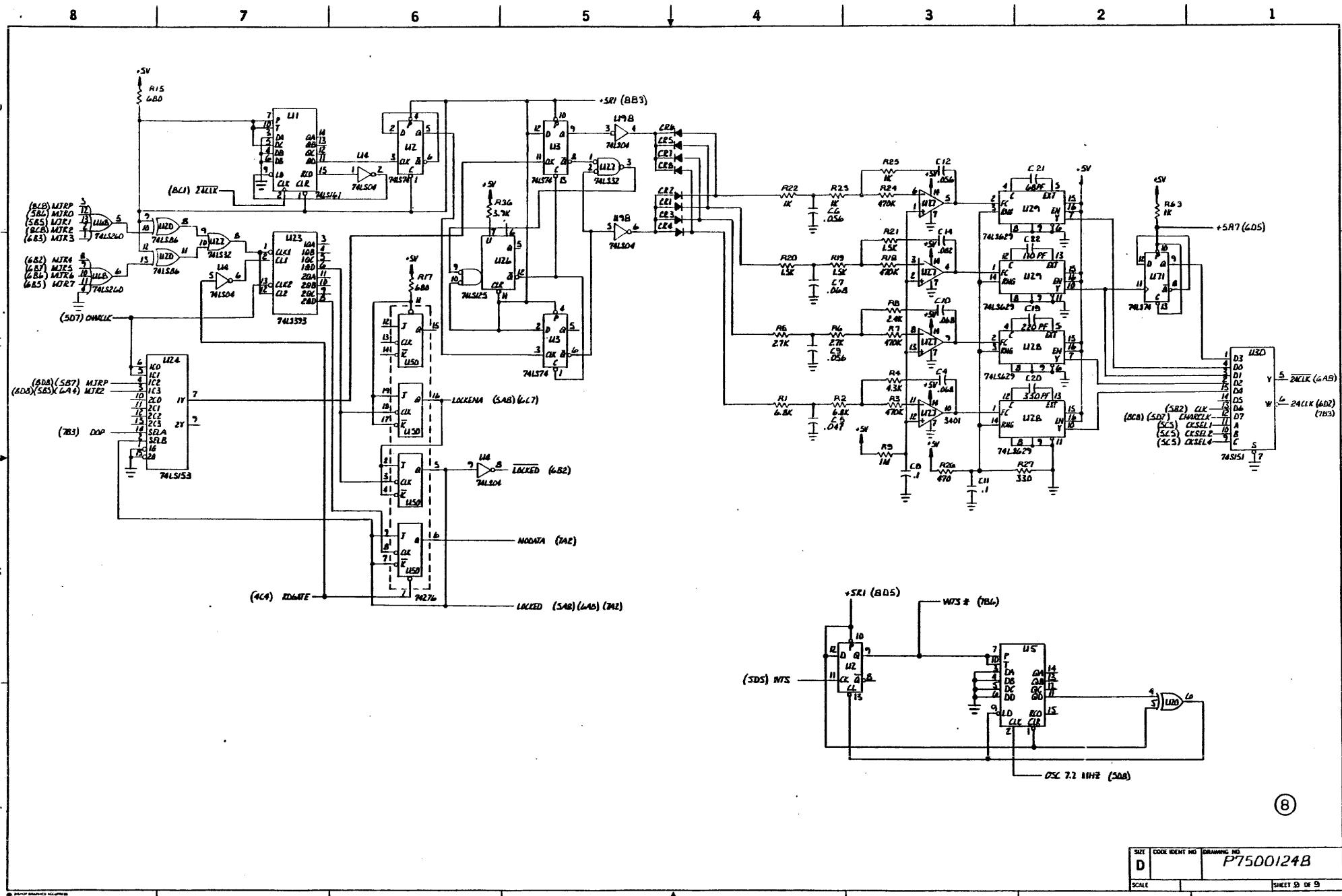






SIZE D	CODE IDENT NO	DRAWING NO P7500124B
SCALE	SHEET 7 OF 9	





8

SIZE D	CODE IDENT NO	DRAWING NO P75001248
SCALE	SHEET 10 OF 9	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	RELEASE	2-7-85	

TC-131 for Technicare:

This configuration corrects a problem where NPG, BG and NPR are not propagated correctly.

This configuration is to be performed on the following assembly only:

P60001427.

To update the above assembly to this configuration perform the rework as follows:

- A. Label the spare location just below the LED's 1-5 as "S1".
- B. Label the second spare location below the LED's 1-5 as "S2".
- C. Install a 74LS14 I.C. in spare location S1 with pin 1 of I.C. in pin 1 of the printed circuit board.
- D. Install the following components in spare location "S2":

COMPONENT	VALUE	LOCATION
P14000335	270 Resistor	S2-2 to S2-15
P15000102	82 PF Capacitor	S2-3 to S2-14
P14000335	270 Resistor	S2-7 to S2-10
P15000102	82 PF Capacitor	S2-8 to S2-9

E. Lift pins:

U76-9, U76-10, U49-9, U49-10.

F. Add Jumpers:

FROM	TO	TO
U73-6	S2-2	
U73-8	S2-7	
S2-3	S2-8	
S2-9	S2-10	S1-13
S2-14	S2-15	S1-1
S1-2	S1-3	
S1-4	U76-9	U76-10
S1-12	S1-11	
S1-10	U49-9	U49-10
S1-7	(S1-8)	Pad on P.C.B. GND

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		
±	±	±
APPROVALS	DATE	
DRAWN <i>G. French</i>	2-7-85	
CHECKED <i>R. Cleo</i>	2-7-85	
ENGR. <i>Z. Fins</i>	2-7-85	



western peripherals™

TUSTIN, CALIFORNIA

CONFIGURATION "T"

TC-131 TECHNICARE

SCALE	SIZE	DRAWING NO.
NONE	A	P79001897

DO NOT SCALE DRAWING

SHEET 1 of 1

MANUAL REVISION HISTORY

REVISION	DATE	DESCRIPTION
B	03/20/85	BOARD LAYOUT CHANGED PLUS NEW SCHEMATIC REMOVED OBSOLETE DRAWINGS

NOTES

(4)

APPENDIX A

STANDARD TAPE DRIVE CABLES AND ADAPTERS

FUNCTIONAL INDEX

	DRAWING NO.
I. RIBBON CABLES AND BACKPLANE CONNECTORS	121004
Assembly - Cable, Control	121006
Assembly - Cable, Read	121014
Assembly - Cable, Write	122036
II. ADAPTER PADDLEBOARDS	122021
1. SCHEMATICS	122022
Schematic - Tape Control Adapter	122037
Schematic - Adapter, Tape Write Connector	122038
Schematic - Adapter, Tape Read Connector	122039
2. ASSEMBLY DRAWINGS	
a. CONTROL	
Assembly - Adapter, Tape Control Connector (Standard)	122006
Assembly - Adapter, Tape Control Connector (90° Mount)	122019
Assembly - Adapter, Tape Control Connector (2-inch Standoff)	122043
b. WRITE	
Assembly Drawing - Tape Write Connector (Standard)	122011
Assembly Drawing - Adapter, Tape Writer (Reverse Image)	122012
Assembly - Adapter, Tape Write (90° Mount)	122013
c. READ	
Assembly Drawing - Adapter, Tape Read Connector	122005
Assembly Drawing - Adapter, Tape Read (Reverse Image)	122018
Assembly - Adapter, Tape Read (90° Mount)	122035
Assembly - Adapter, Tape Read (Reverse Image 90° Mount)	122041
d. DRIVE SELECT JUMPERS	
Assembly, Jumper Array, Select Switch Option	122010
Assembly, Jumper Array, Select Switch Option (4th Drive)	122011
Assembly, Jumper Array, Non-Select Switch Option	122012
III. SPECIAL FEATURE MODIFICATIONS	
Modification Drawing, Tape Control Adapter Configuration "S"	112001
Modification Drawing - Tape Control Adapter Configuration "N"	122044
Modification Drawing, Cipher 900X (Config. "A")	79000410
Modification Drawing, Cipher 900X (Config. "B")	79000642

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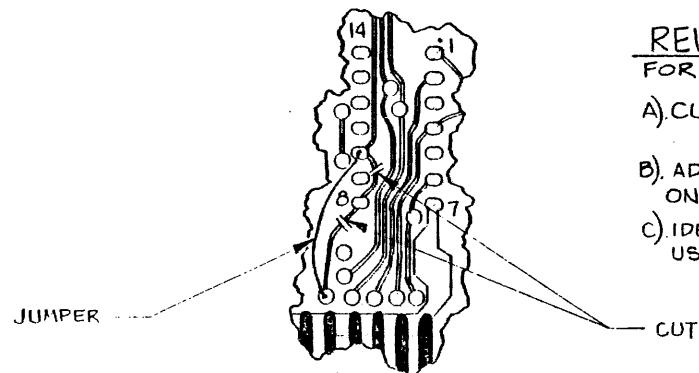
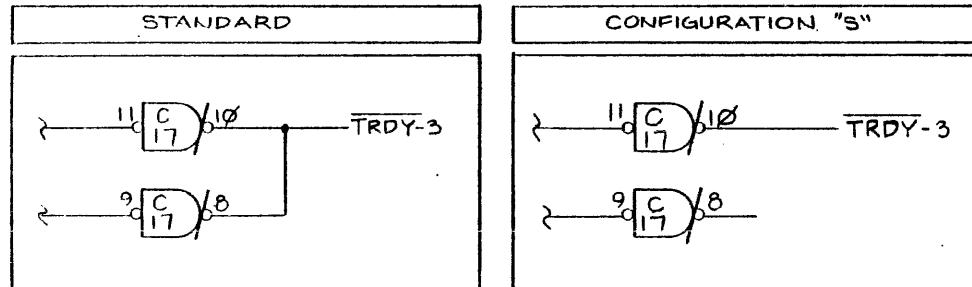
TITLE	DRAWING NO.
Modification Drawing, Tape Control Adapter (Config. "S")	112001
Assembly - Cable, Control	121004
Assembly - Cable, Read	121006
Assembly - Cable, Write	121014
Assembly Drawing - Adapter, Tape Read Connector	122005
Assembly Drawing - Tape Write Connector	122006
Assembly, Jumper Array, Select Switch Option	122010
Assembly, Jumper Array, Select Switch Option, Special	122011
Assembly, Jumper Array, Non-Select Switch Option	122012
Assembly Drawing - Adapter, Tape Read, Kennedy, Cipher	122018
Assembly Drawing - Adapter, Tape Write, Kennedy, Cipher	122019
Schematic - Adapter, Tape Write Connector	122021
Schematic - Adapter, Tape Read Connector	122022
Assembly, Adapter, Tape Write, Kennedy 9800	122034
Assembly, Adapter, Tape Read, Kennedy 9800	122035
Schematic - Tape Control Adapter	122036
Assembly - Adapter, Tape Control Connector	122037
Assembly - Adapter, Tape Control Connector, 90° Mounting	122038
Assembly - Adapter, Tape Control Connector, 2-inch Standoff	122039
Assembly - Adapter, Tape Read, Reverse Image, 90°	122043
Modification Drawing, Tape Control Adapter (Config. "N")	122044
Modification Drawing, Cipher 900X (Config. "A")	79000410
Modification Drawing, Cipher 900X (Config. "B")	79000642
Notes	

PURPOSE:

THIS MODIFICATION REQUIRED FOR CONTROL OF QUANTEX
TAPE DRIVES.

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REDRAWN TO CORRECT DETAIL FOR E OR F ARTWORK (REF ECQ 780)	10-2-80	Rippl

SHEET ② OF SCHEMATIC 122036 IS ALTERED AS OUTLINED BELOW.



SOLDER SIDE VIEW
IC. LOCATION "C"

REWORK INSTRUCTIONS:
FOR ASSY: 122037, 122038, 122039

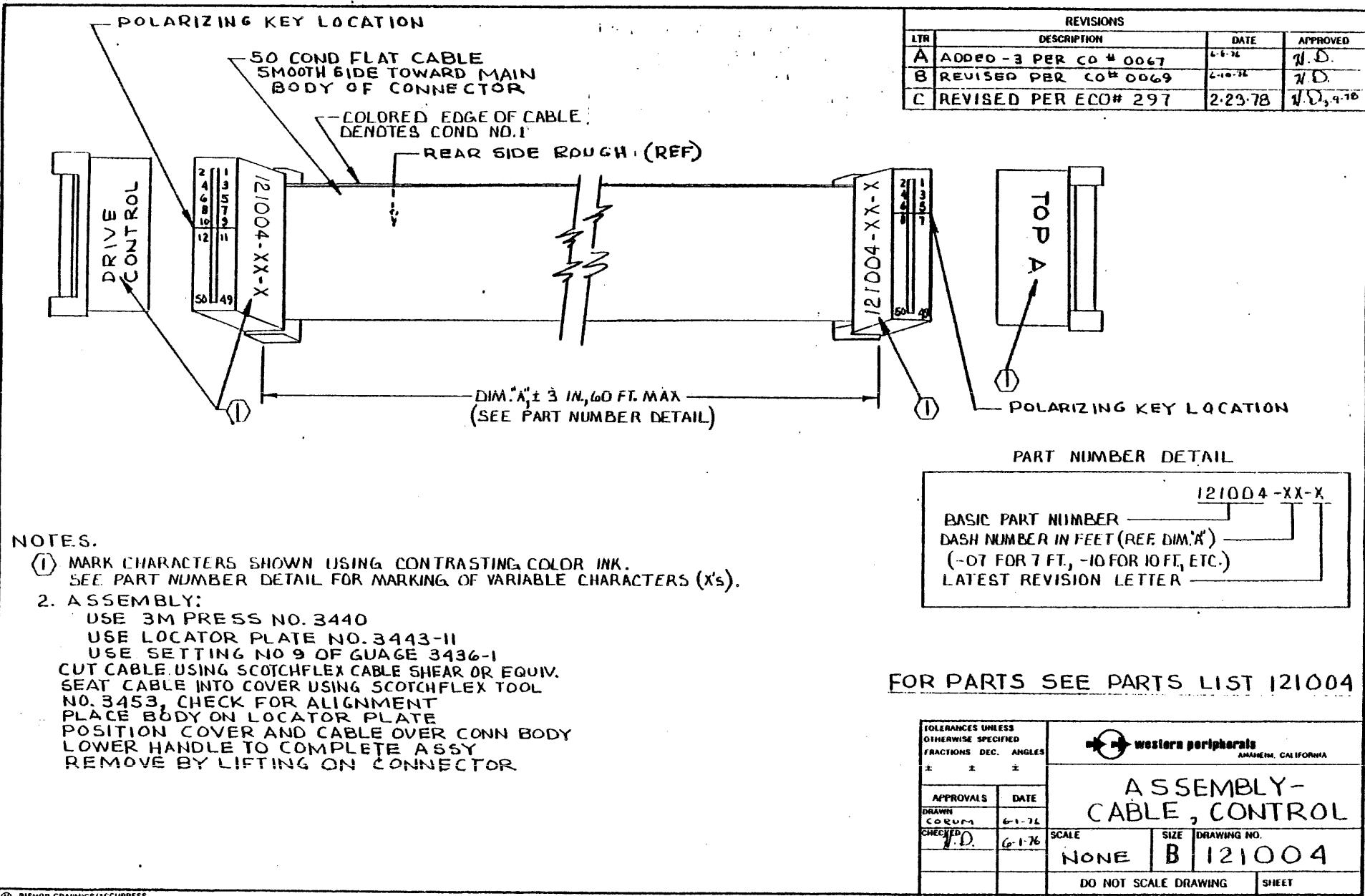
- CUT ETCH 2 PLCS AT C-8 (SOLDER SIDE)
- ADD JUMPER FROM C-10 TO FEED-THRU
ON ETCH THAT WAS CONNECTED TO C-8
- IDENTIFY AT ASSY NO. WITH "CONF 5"
USING BLACK INK.

OCT 2 1980

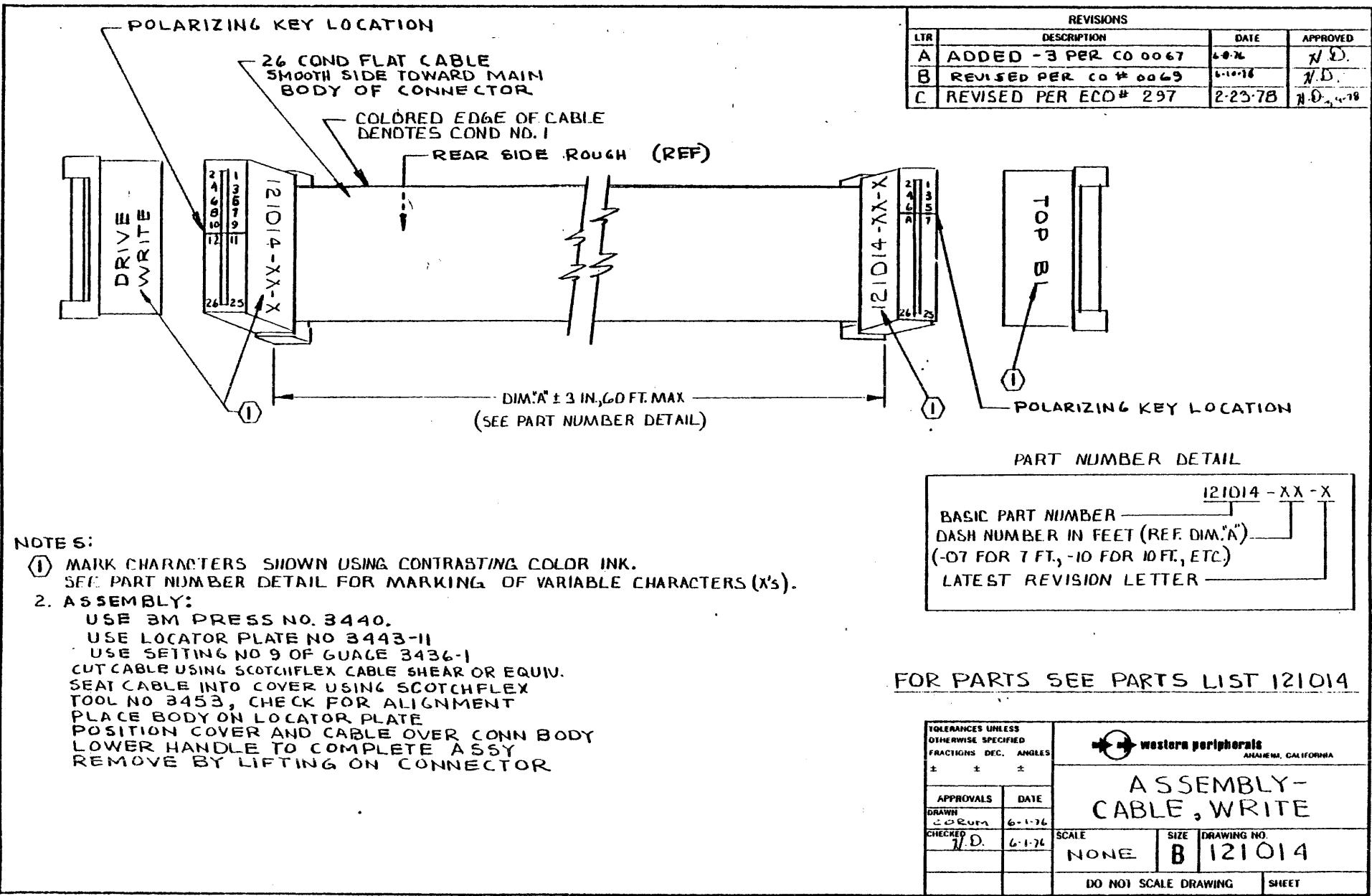
TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC ANGLES		
±	±	±
APPROVALS	DATE	
DRAWN BY ANDREWSEN	10-1-80	
CHECKED L. L. L.	10-2-80	
SCALE	SIZE	DRAWING NO.
	B	112001
DO NOT SCALE DRAWING		
SHEET 1 OF 1		

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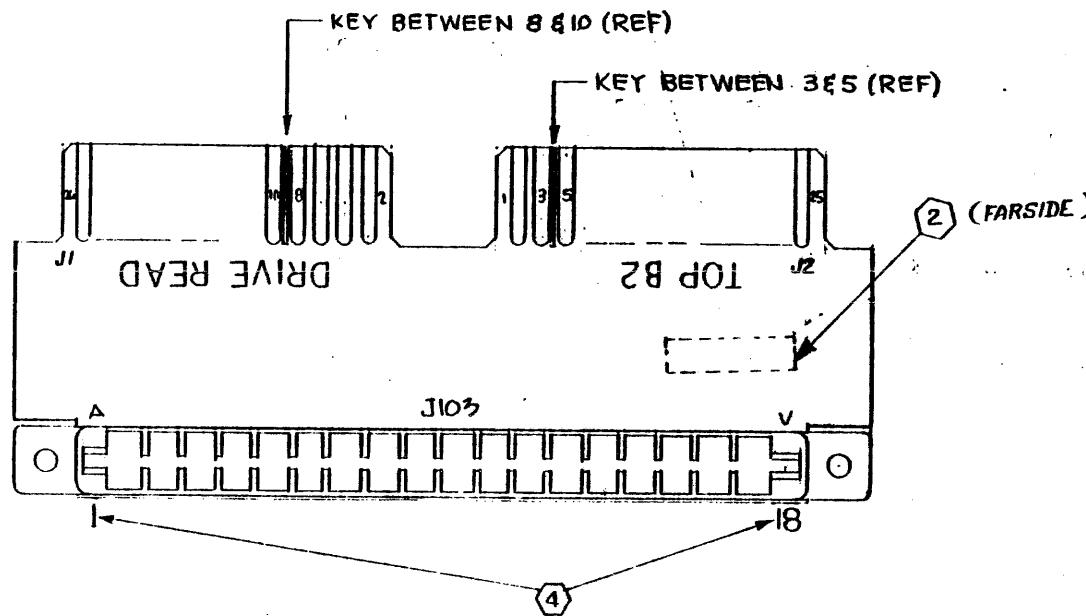
MODIFICATION DWG-
TAPE CONT. ADAPTER, CONF "S"



	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>LTR</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ADDED -3 PER CO # 0067</td> <td>6-1-76</td> <td>N.D.</td> </tr> <tr> <td>B</td> <td>REVISED PER CO # 0069</td> <td>6-10-76</td> <td>N.D.</td> </tr> <tr> <td>C</td> <td>REVISED PER ECD# 297</td> <td>2-23-78</td> <td>N.D. 2-7-78</td> </tr> </tbody> </table>	REVISIONS				LTR	DESCRIPTION	DATE	APPROVED	A	ADDED -3 PER CO # 0067	6-1-76	N.D.	B	REVISED PER CO # 0069	6-10-76	N.D.	C	REVISED PER ECD# 297	2-23-78	N.D. 2-7-78																
REVISIONS																																					
LTR	DESCRIPTION	DATE	APPROVED																																		
A	ADDED -3 PER CO # 0067	6-1-76	N.D.																																		
B	REVISED PER CO # 0069	6-10-76	N.D.																																		
C	REVISED PER ECD# 297	2-23-78	N.D. 2-7-78																																		
PART NUMBER DETAIL <div style="border: 1px solid black; padding: 5px; display: inline-block;"> 121006-X-X-X BASIC PART NUMBER _____ DASH NUMBER IN FEET (REF. DIM. "A") (-07 FOR 7 FT., -10 FOR 10FT., ETC.) LATEST REVISION LETTER _____ </div>																																					
FOR PARTS SEE PARTS LIST 121006																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">TOLERANCES UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td colspan="3" style="text-align: center;">FRACTIONS DEC. ANGLES</td> </tr> <tr> <td style="text-align: center;">±</td> <td style="text-align: center;">±</td> <td style="text-align: center;">±</td> </tr> <tr> <td colspan="2" style="text-align: center;">APPROVALS</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td style="text-align: center;">DRAWN</td> <td style="text-align: center;">FORUM</td> <td style="text-align: center;">6-1-76</td> </tr> <tr> <td style="text-align: center;">CHECKED</td> <td style="text-align: center;">1.D.</td> <td style="text-align: center;">6-1-76</td> </tr> <tr> <td colspan="2" style="text-align: center;">SCALE</td> <td style="text-align: center;">SIZE</td> </tr> <tr> <td colspan="2" style="text-align: center;">NONE</td> <td style="text-align: center;">B</td> </tr> <tr> <td colspan="3" style="text-align: center;">DRAWING NO.</td> </tr> <tr> <td colspan="3" style="text-align: center;">121006</td> </tr> <tr> <td colspan="3" style="text-align: center;">DO NOT SCALE DRAWING</td> </tr> <tr> <td colspan="3" style="text-align: center;">SHEET</td> </tr> </table>		TOLERANCES UNLESS OTHERWISE SPECIFIED			FRACTIONS DEC. ANGLES			±	±	±	APPROVALS		DATE	DRAWN	FORUM	6-1-76	CHECKED	1.D.	6-1-76	SCALE		SIZE	NONE		B	DRAWING NO.			121006			DO NOT SCALE DRAWING			SHEET		
TOLERANCES UNLESS OTHERWISE SPECIFIED																																					
FRACTIONS DEC. ANGLES																																					
±	±	±																																			
APPROVALS		DATE																																			
DRAWN	FORUM	6-1-76																																			
CHECKED	1.D.	6-1-76																																			
SCALE		SIZE																																			
NONE		B																																			
DRAWING NO.																																					
121006																																					
DO NOT SCALE DRAWING																																					
SHEET																																					



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REV PER CO NO. 0105	9-8-76	
B	E.C.O NO.-0190	6-6-77	W.D. 11-11
C	REVISED NOTE 2 PER ECO # 415	3/2/79	RVN 6-1-79
D	ADDED NOTE ④ PER ECO# 504	6-20-79	W.D. 6-20-79



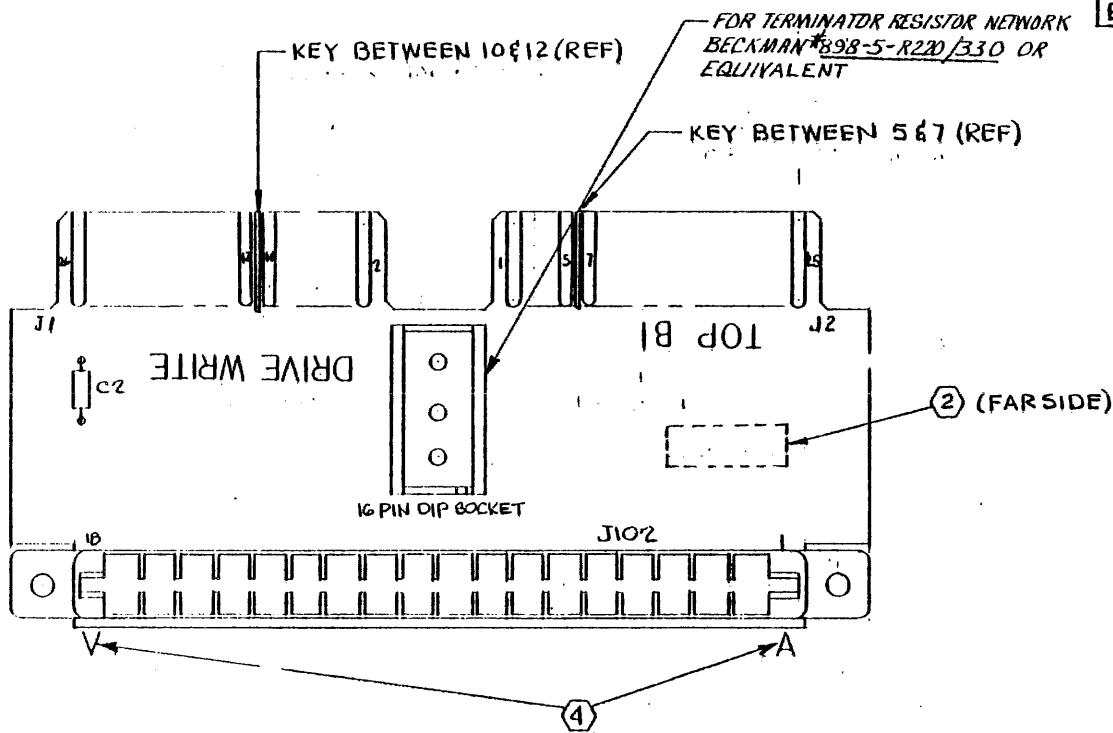
NOTE.

1. REF SCHEMATIC DWG NO. 122022
2. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX WHERE SHOWN USING BLK INK.
3. FOR MATL SEE P/L 122005
4. MARK CHARACTERS SHOWN (1&18) ON SIDE OF CONNECTOR USING CONTRASTING INK.

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TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLED		western peripherals ANAHEIM, CALIFORNIA	
±	±	±	
APPROVALS	DATE	ASSEMBLY DWG.	
DRAWN HRD	2-13-76	ADAPTER, TAPE READ	
CHECKED	2-25-76	CONNECTOR	
SCALE	SIZE	DR.WNG NO.	
2:1	B	122005	
DO NOT SCALE DRAWING			
SHEET 1 OF 1			

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO. 0190	6-6-77	J.D. 6-11-77
B/C	ADVANCED REV LTR TO AGREE WITH P/L	2/1/79 J.P.	W.H.W. 2-6-79
D	REVISED NOTE 2 PER ECO# 916	2/1/79 J.P.	W.H.W. 2-6-79
E	ADDED NOTE (4) PER ECO# 504	6-20-79 J.Z.	(J.P. C.R.W.)

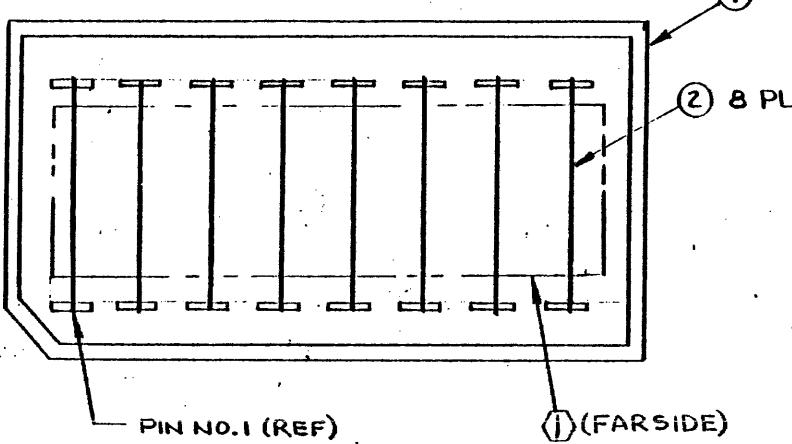


NOTE:

1. REF SCHEMATIC DWG. NO. 122021.
2. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX. WHERE SHOWN USING BLK INK.
3. FOR MATL SEE P/L 122006.
4. MARK CHARACTERS SHOWN (A&V) ON SIDE OF CONNECTOR USING CONTRASTING INK.

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TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEG. ANGLES		
APPROVALS	DATE	DRAWN BY
HRB	2-12-76	HRB
CHECKED	2-15-76	
SCALE		SIZE
2:1		DRAWING NO.
		B 122006
DO NOT SCALE DRAWING		
SHEET 1 OF 1		



WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	16
2	2	15
3	3	14
4	4	13
5	5	12
6	6	11
7	7	10
8	8	9

BILL OF MATERIALS

ITEM	NO. REQD	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16 PIN	CIRCUIT ASSY OR EQUIV
2	A/R		WIRE, INSULATED, #30 AWG SOLID	WIRE WRAP WIRE

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

NOTE: UNLESS OTHERWISE SPECIFIED
① AFFIX ADHESIVE LABEL WITH PART NO. & LATEST
REV LTR WHERE SHOWN

**TOLERANCES UNLESS
OTHERWISE SPECIFIED**
FRACTIONS DEC. ANGLE

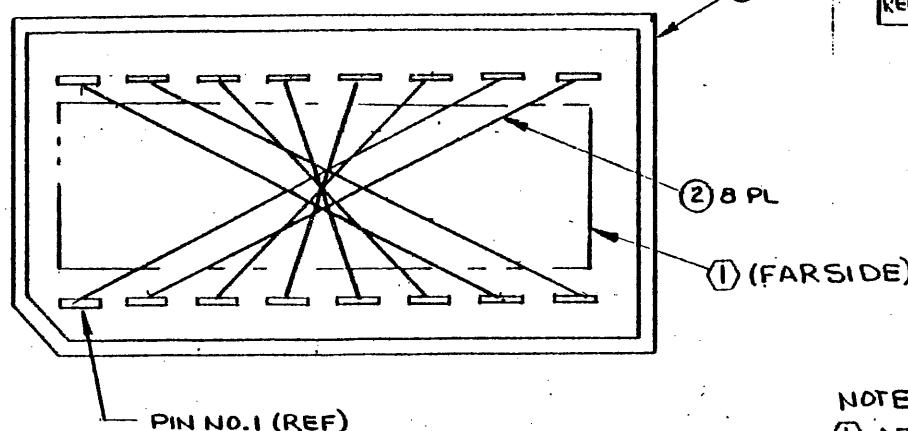
western peripherals

ANAHEIM, CALIFORNIA

ASSY, JUMPER ARRAY,
SELECT SWITCH OPTION

6
X SCALE SIZE DRAWING NO.
NONE B 122010

DO NOT SCALE DRAWING



WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	10
2	2	9
3	3	11
4	4	12
5	5	13
6	6	14
7	7	16
8	8	15

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
REF	REC. CHG: ADD "FAR SIDE" TO (1) (ALL PARTS MADE CONFORM)		

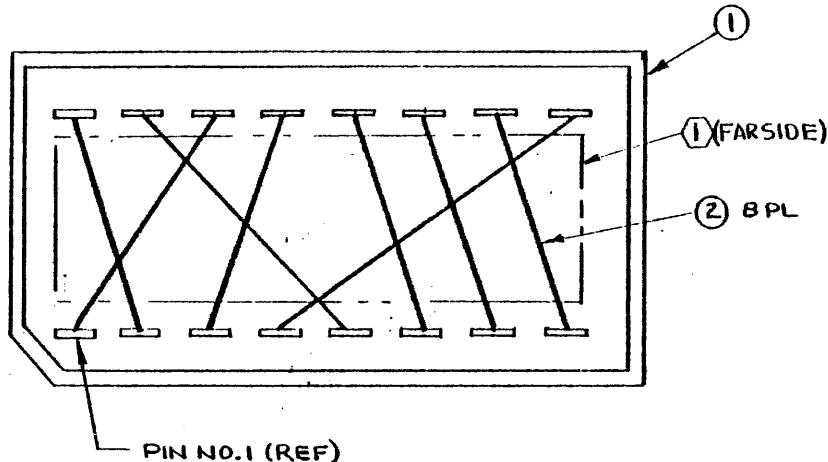
NOTE: UNLESS OTHERWISE SPECIFIED

(1) AFFIX ADHESIVE LABEL WITH PART NO. & LATEST REV LTR WHERE SHOWN

BILL OF MATERIALS

ITEM	NO. REQ'D	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16-PIN	CIRCUIT ASSY OR EQUIV
2	A/R		WIRE, INSULATED, #30 AWG, SOLID	WIRE WRAP WIRE

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS	DATE	DRAWN BY	CHECKED BY
	11-18-76		11-18-76
		None	Size Drawing No.
			B 122011
		DO NOT SCALE DRAWING	SHEET 1 OF 1



WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	14
2	2	16
3	3	13
4	4	9
5	5	15
6	6	12
7	7	11
8	8	10

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

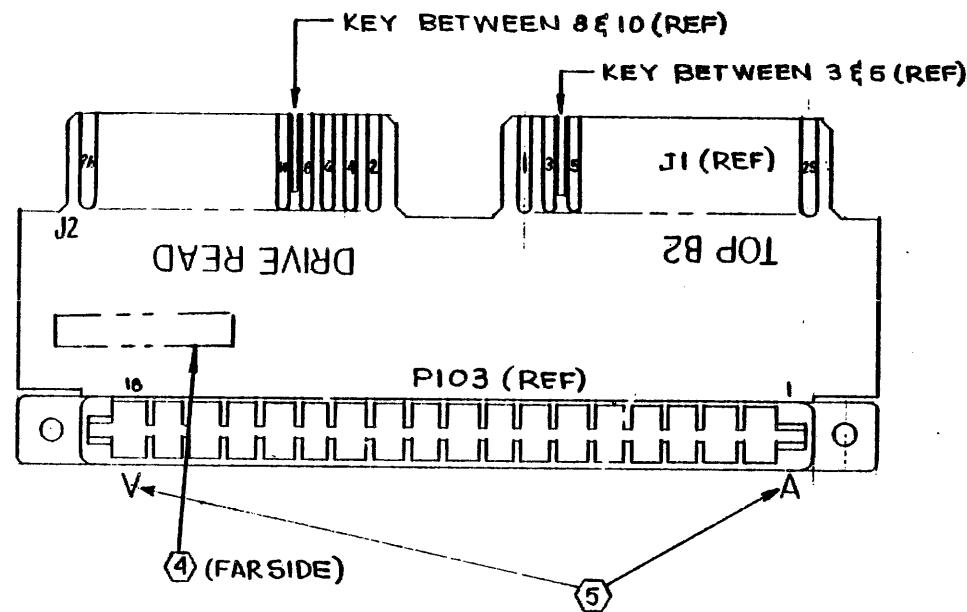
NOTE: UNLESS OTHERWISE SPECIFIED
 ① AFFIX ADHESIVE LABEL WITH PART NO.
 & LATEST REV LTR WHERE SHOWN

BILL OF MATERIALS

ITEM	NO. REQ'D	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16-PIN	CIRCUIT ASSY OR EQUIV
2	A/R		WIRE, INSULATED, #30 AWG SOLID	WIRE WRAP WIRE

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES \pm \pm \pm		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS	DATE	ASSY, JUMPER ARRAY, NON-SELECT SWITCH OPTION	
DRAWN C.R.D.M.	11-18-76	CHECKED I.D. 11-18-76	
SCALE NONE	SIZE B	DRAWING NO. B122012	DO NOT SCALE DRAWING
		SHEET 1 OF 1	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORP. CO # 0145	1-21-77	H.D. 1-24-77
B	E.C.O. NO. - 0190	6-6-77	H.D. 6-11-77
C	DELETED NOTE 2 PER E.C.O. #417	11/11/79	H.D. 11-8-79
D	ADDED NOTE (5) PER ECO #504	6-20-79	H.D. 6-20-79



NOTE: UNLESS OTHERWISE SPECIFIED

1. REF SCHEMATIC DWG NO. 122022

2.

3. FOR MATERIAL SEE P/L 122018

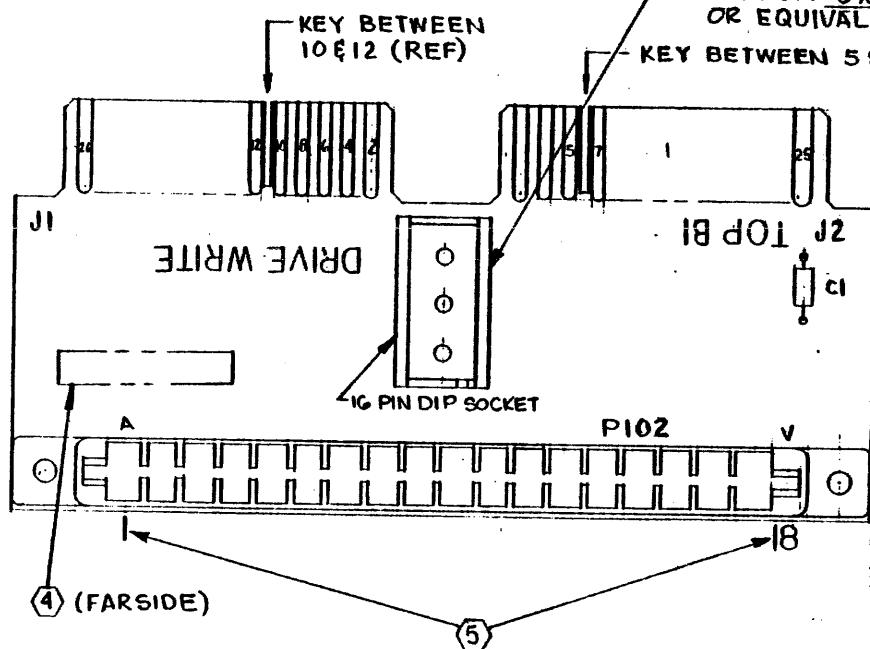
④ RUBBER STAMP ASSY NO. WITH LATEST REV
LTR APPROX WHERE SHOWN USING BLK INK.

⑤ MARK CHARACTERS SHOWN (A&V) ON SIDE OF
CONNECTOR USING CONTRASTING INK.

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TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES \pm \pm \pm			western peripherals ANAHEIM, CALIFORNIA		
APPROVALS	DATE	ASSEMBLY DWG. ADAPTER, TAPE READ KENNEDY-CIPHER			
DRAWN HRD	2-15-76	SCALE 2:1 SIZE DRAWING NO. B 122018			
CHECKED dl	2-25-76	DO NOT SCALE DRAWING SHEET 1 OF 1			

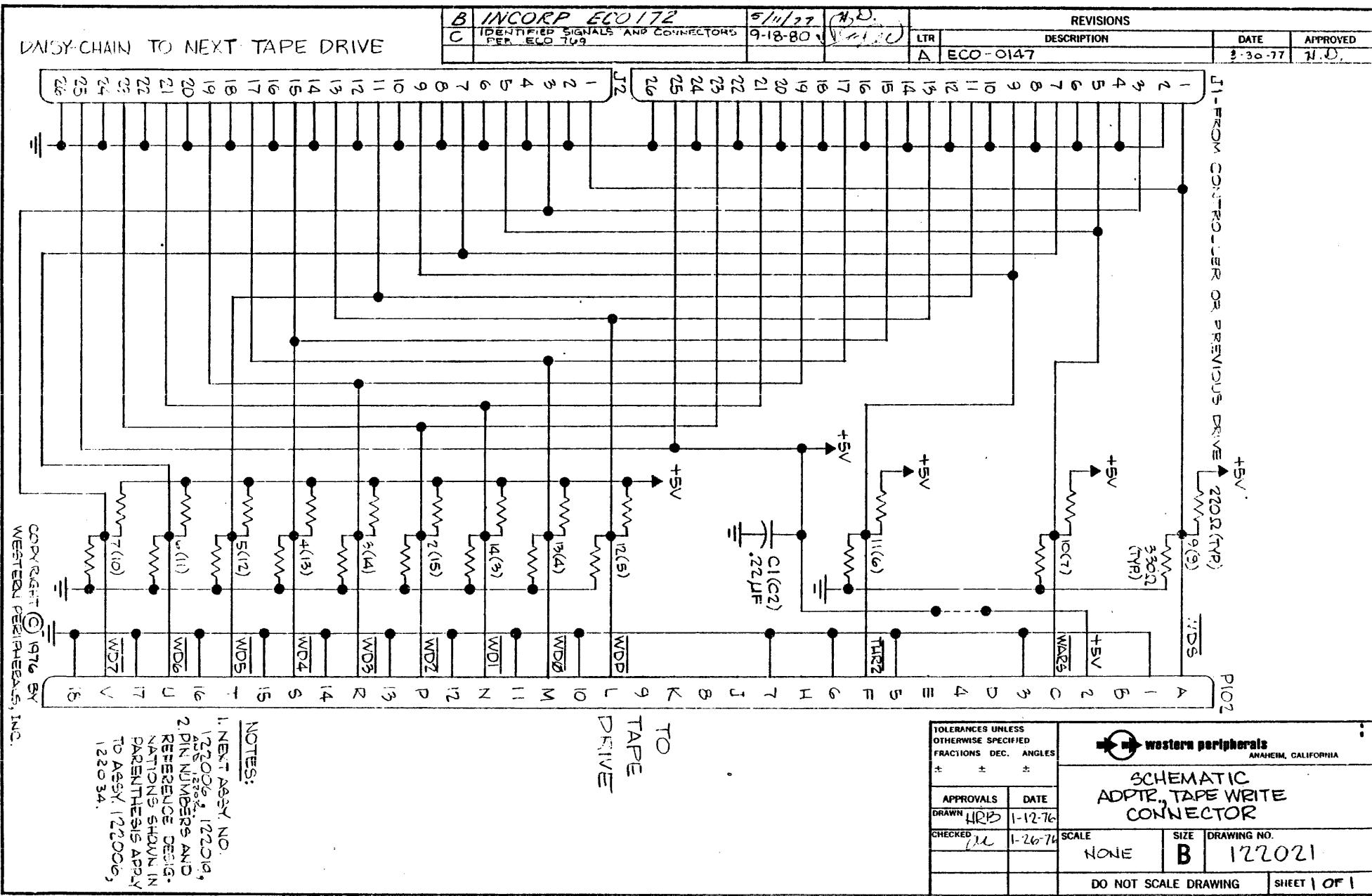
REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORPORATE CO # 0146 <i>72</i>	1-21-77	N.D. 1-24-77
B	INCORP ECO 172	5/11/77	N.D. 5-11-77
C	INCORP. ECO. NO. -0190	6-6-77	N.D. 6-11-77
D	DELETED NOTE 2 & CALLOUT PER ECO 418	10/21/79	J.H.W. 6-19
E	ADDED NOTE (5) PER ECO # 504	6-20-79	Craig G. 6-20-79



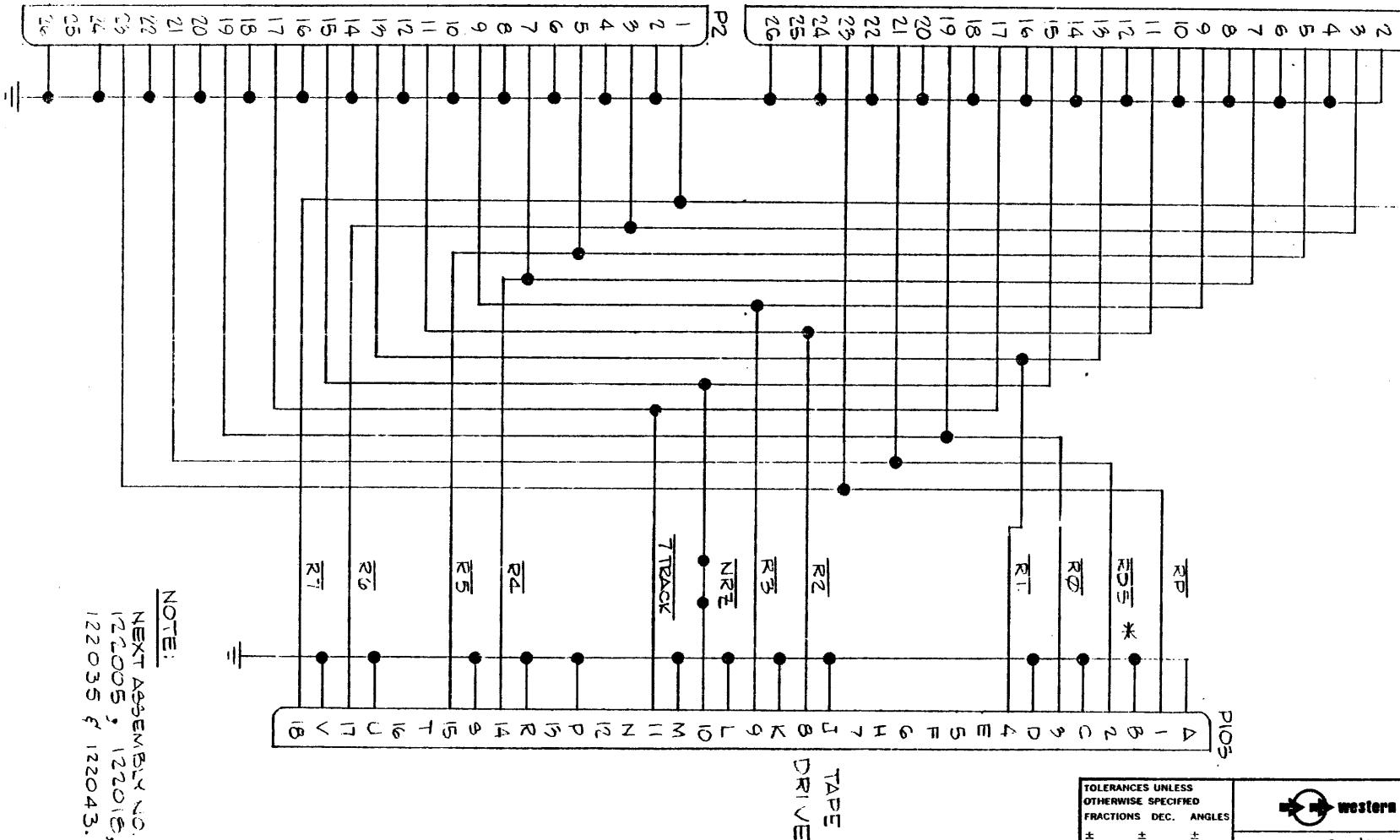
NOTE: UNLESS OTHERWISE SPECIFIED
 1. REF SCHEMATIC DWG NO. 122021
 2.

3. FOR MATERIAL SEE P/L 122019
 ④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX WHERE SHOWN
 ⑤ MARK CHARACTERS (1&18) ON SIDE OF CONNECTOR USING CONTRASTING INK.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES \pm \pm \pm		Western peripherals ANAHEIM, CALIFORNIA	
APPROVALS	DATE	ASSEMBLY DWG. ADAPTER, TAPE WRITE KENNEDY-CIPHER	
<i>HRB</i>	2-12-76	SCALE	
SUPERVISOR	2-25-76	2:1	SIZE
		DRAWING NO.	
		122019	
		DO NOT SCALE DRAWING	
		SHEET 1 OF 1	



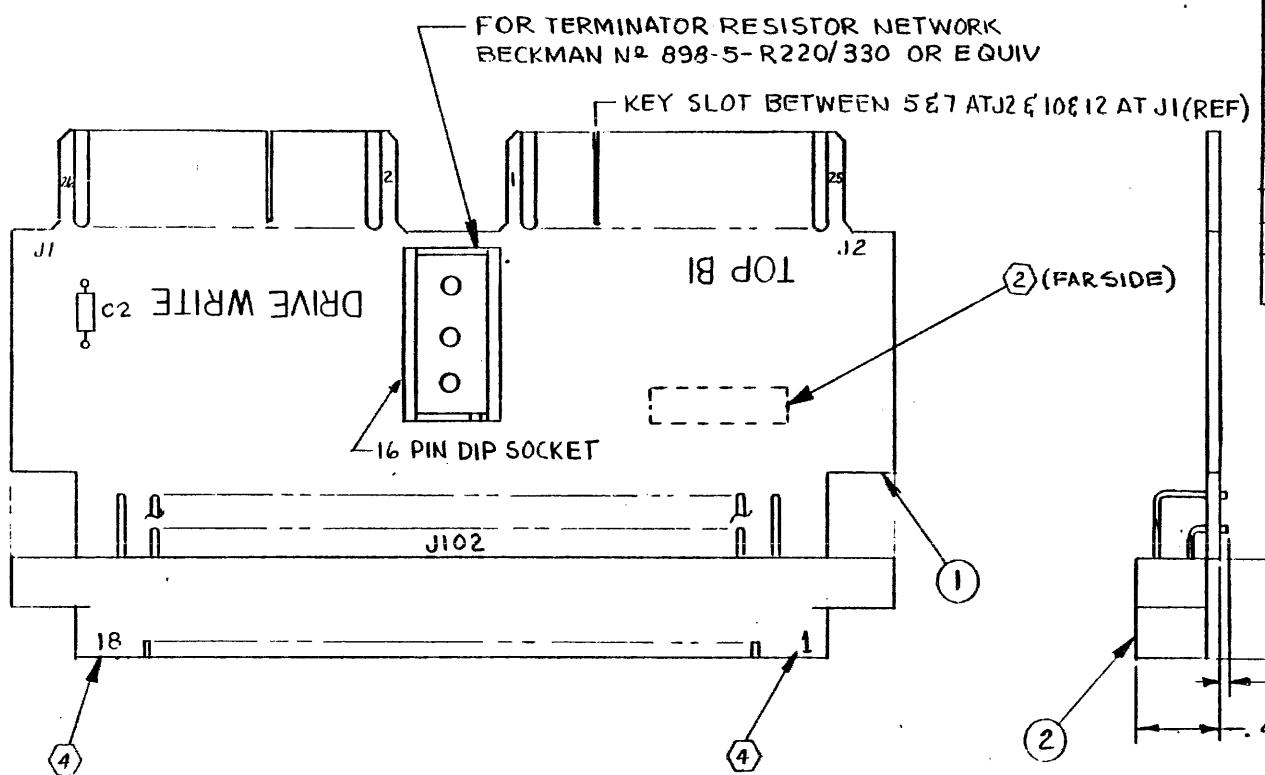
DAISY-CHAIN TO NEXT TAPE DRIVE



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	IDENTIFIED SIGNALS AND CONNECTORS PER ECO 769	9-18-80	

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS	DATE	SCHEMATIC ADPTR., TAPE READ CONNECTOR	
DRAWN HRB	1-13-76		
CHECKED !	1-26-76	SCALE	SIZE
		NONE	B
			DRAWING NO. 122022
			DO NOT SCALE DRAWING
			SHEET 1 OF 1

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORP ECO 172	5/11/77	J.D.S. 177
B	INCORP. E.C.O. NO. 0190	6-6-77	N.J.M. 177
C	INCORP. E.C.O. NO. 097	8-8-77	N.J.M. 177
D	ADD NOTE 4 PER ECO 355	7-11-77	N.J.M. 177
E	ADVANCE REV LTR TO AGREE WITH P/L	7-11-77	N.J.M. 177
F	CHANGED NOTE 2 PER ECO 416	7-16-77	N.J.M. 177
G	INC ECO # 852 AND CHG ASSY NO. LOCATION	7-24-81	J.D.S. 177

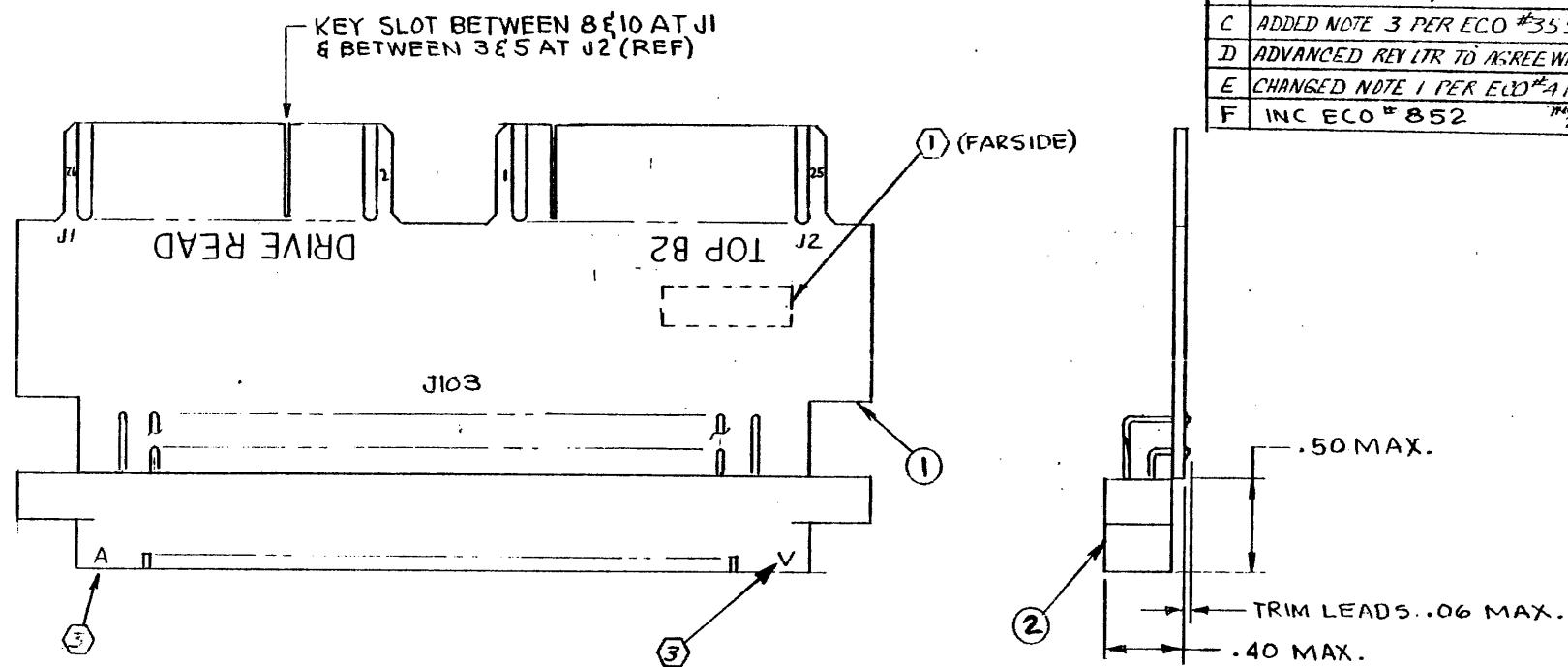


- (4) RUBBER STAMP CHARACTERS SHOWN USING WHITE INK.
- (3) FOR MATERIAL LIST SEE P/L 122034.
- (2) RUBBER STAMP ASSY NO. & LATENT REV LTR APPROX WHERE SHOWN USING R.R. INK.
- 1. REF SCHEMATIC DWG NO. 122021.
- NOTE : UNLESS OTHERWISE SPECIFIED.

MAR 27 1981

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES			western peripherals ANAHEIM, CALIFORNIA	
±	±	±	APPROVALS	DATE
DRAWN CDRUM	6-11-76		ASSEMBLY- ADAPTER TAPE WRITE KENNEDY 9800	
CHECKED			SCALE	SIZE DRAWING NO.
			2X	B 122034
			DO NOT SCALE DRAWING SHEET 1 OF 1	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO. 0190	6-6-77	N.D. 11-11
B	E.C.O. NO. 0197	8-8-77	N.D. 8-9-77
C	ADDED NOTE 3 PER ECO #355	11/2/77	11/2/77
D	ADVANCED REV LTR TO AGREE WITH P/L	11/2/77	11/2/77
E	CHANGED NOTE 1 PER ECO #415	11/2/77	11/2/77
F	INC ECO # 852	11/3/77	11/3/77



MAR 27 1981

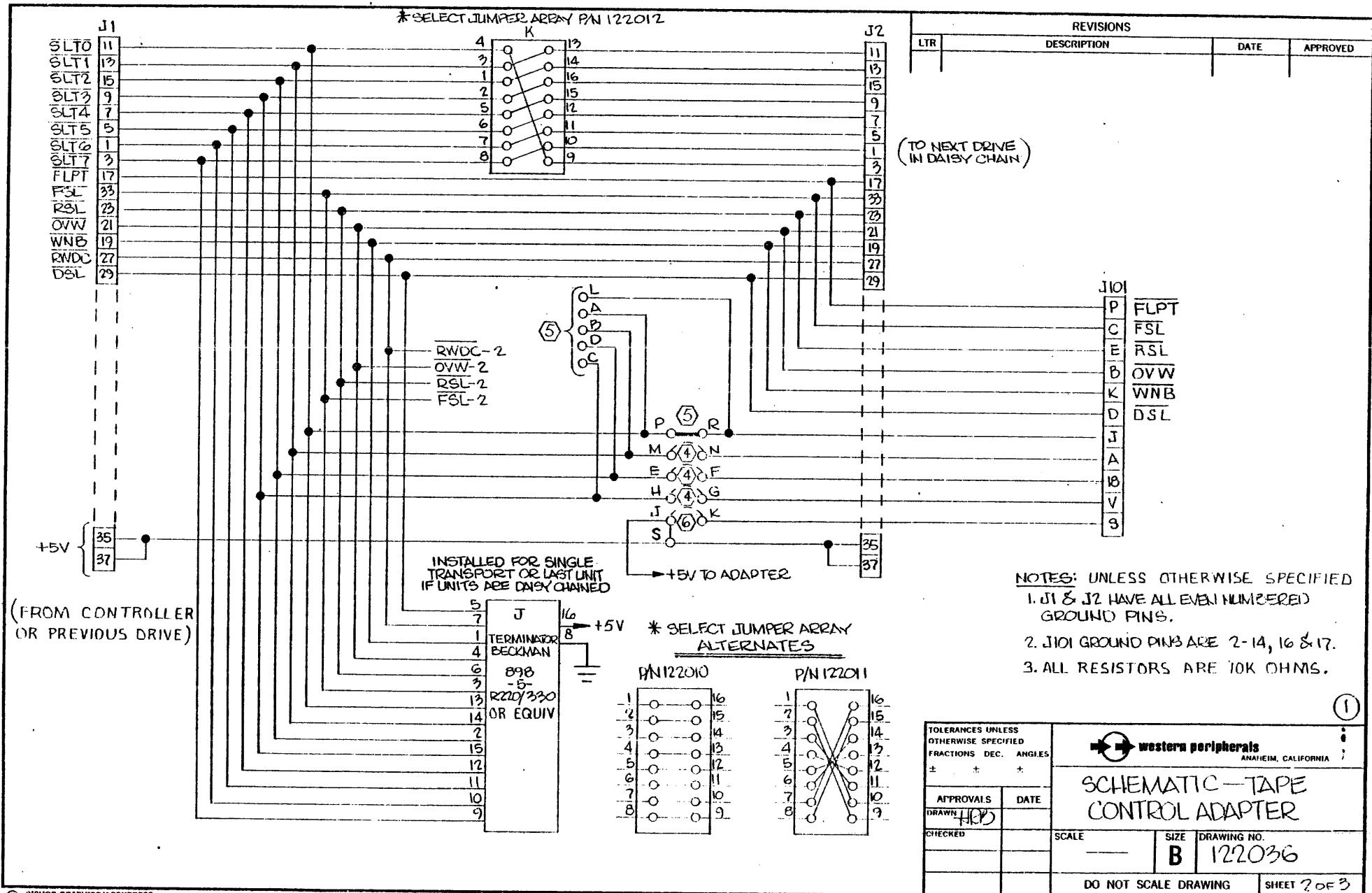
TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	DEC.	ANGLES
±	±	±
APPROVALS	DATE	
DRAWN C.R. W.M.	6-11-76	
CHECKED M.C.		
SCALE	SIZE	DRAWING NO.
2X	B	122035
DO NOT SCALE DRAWING		
SHEET 1 OF 1		

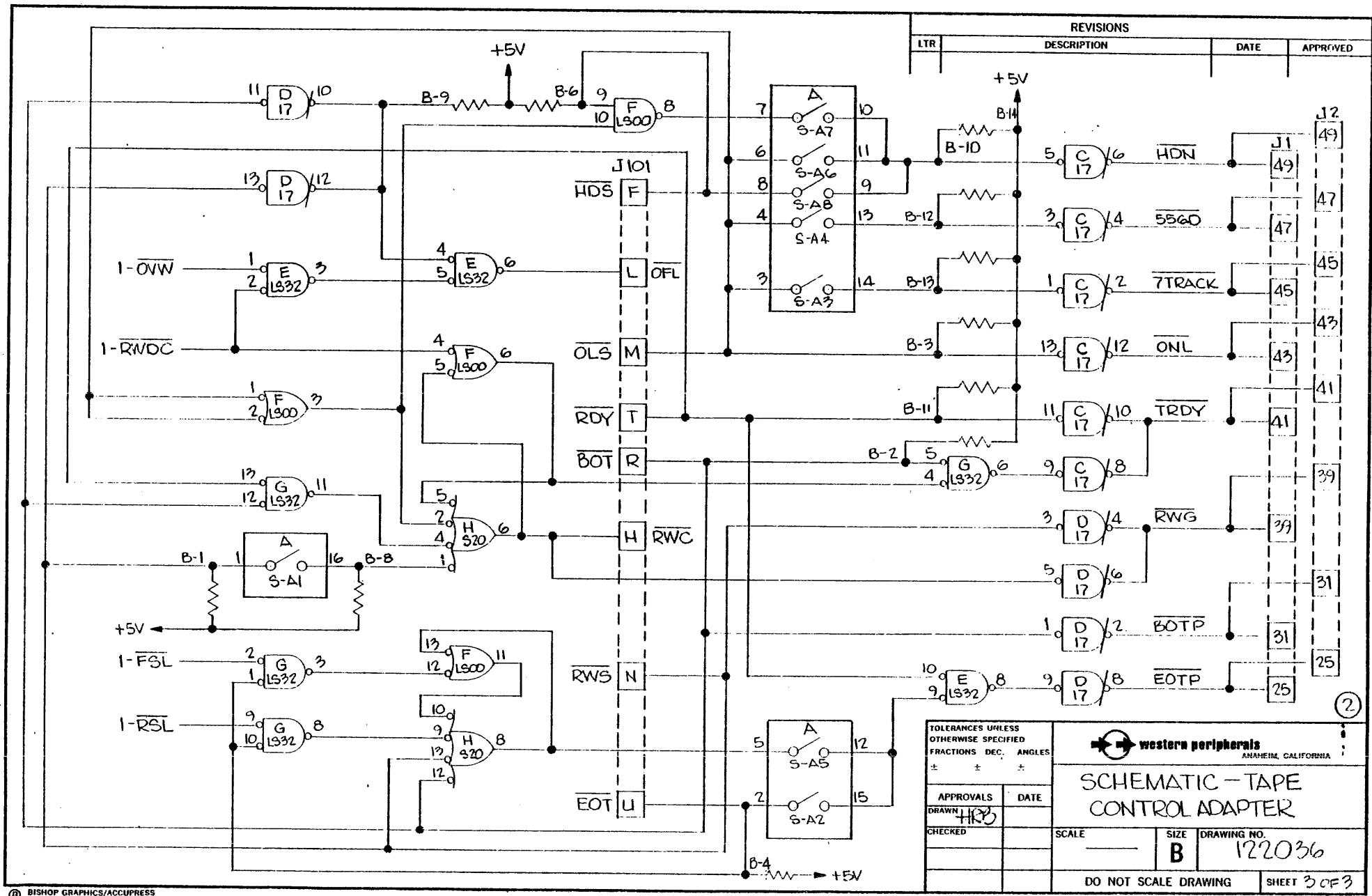
- (3) RUBBER STAMP CHARACTERS SHOWN USING WHITE INK.
2. REF SCHMATIC DWG NO. 122022.
- (1) RUBBER STAMP ANY NO. & DATE ST. SVL LTR APPROX WHEN SHOWN USING RIK INK.
- NOTE : UNLESS OTHERWISE SPECIFIED.

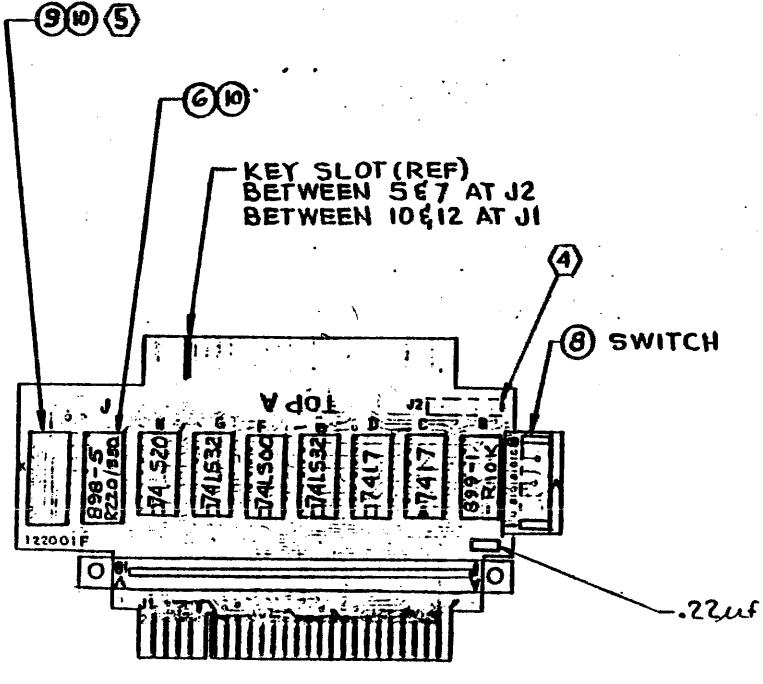
REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	CORRECTED SWITCH SETTING CHART FOR SA4 PER ECO 178.	5-4-77	
B	REDRAWN PER ECO 236.	5-16-78	N.D. 5-16-78
C	CHANGED I.C. LOC 'H' PER ECO 806	12-9-78	(initials)

SWITCH A	SWITCH SETTINGS	SYSTEM CONSIDERATIONS
1	ON FOR DRIVES THAT REQUIRE REWIND COMMAND REMOVAL PRIOR TO BOT	1. REMOVE ALL INTERFACE TERMINATORS FROM TRANSPORT(S)
	OFF FOR DRIVES THAT DO NOT REQUIRE REWIND COMMAND REMOVAL PRIOR TO BOT	2. INSTALL CONTROL TERMINATOR ONLY IN LAST DAISY CHAIN POSITION
2	ON FOR DRIVES THAT STORE EOT STATUS NOTE: A5 SHOULD BE OFF	3. CORRECTLY IDENTIFY CONFIGURATION AND SET SWITCHES ACCORDINGLY
	OFF FOR DRIVES THAT DO NOT STORE EOT STATUS NOTE: A5 SHOULD BE ON	
3	ON FOR 7 TRACK DRIVES	NOTES:
	OFF FOR 9 TRACK DRIVES	<p>1. FOR 7 TRACK DRIVES IN DRIVE DAISY CHAINS, ONLY PRIMARY SPEED SELECTION IS AVAILABLE.</p> <p>2. REF. ASSY. DWG. 122037, 122038, & 122039.</p> <p>③ 122010 INSTALLED WHEN TRANSPORT HAS 4-POSITION UNIT SELECT SWITCH (SEE EXCEPTION BELOW).</p> <p>122011 INSTALLED IN 4th TRANSPORT IF MORE THAN 4 TRANSPORTS ARE DAISY CHAINED.</p> <p>122012 INSTALLED WHEN TRANSPORT DOES NOT HAVE UNIT SELECT SWITCH.</p> <p>④ FOR PERTEC COMPATIBLE UNIT SELECT OPTION: JUMPER E TO F, G TO H, AND M TO N.</p> <p>⑤ FOR EXTERNALLY CONNECTED UNIT SELECT SWITCH: CUT ETCH BETWEEN P&R AND CONNECT EXTERNAL SWITCH TO A,B,C,D,&L.</p> <p>⑥ TO POWER ADAPTER FROM TAPE TRANSPORT, CUT ETCH BETWEEN J&S AND JUMPER J TO K.</p> <p>7. FOR CONFIGURATION "L" SEE DWG. 130047.</p> <p>8. FOR CONFIGURATION "N" SEE DWG. 122044.</p> <p>9. FOR CONFIGURATION "S" SEE DWG. 112001.</p>
4	ON FOR 7 TRACK 556/800 BPI DENSITY SELECTIONS OR 9 TRACK SECONDARY SPEED (SELECTION B)	
	OFF FOR 7 TRACK 200/556 BPI DENSITY SELECTIONS OR 9 TRACK PRIMARY SPEED (SELECTION A)	
5	ON FOR DRIVES THAT DO NOT STORE EOT STATUS NOTE: A2 SHOULD BE OFF	
	OFF FOR DRIVES THAT STORE EOT STATUS NOTE: A2 SHOULD BE ON	
6	ON FOR 9 TRACK NRZI ONLY DRIVE	
	OFF FOR 7 TRACK DRIVES, 9 TRACK 1600 BPI DRIVES, OR 9 TRACK 800/1600 DUAL DENSITY	
7	ON FOR DUAL DENSITY 9 TRACK DRIVES THAT DO NOT PRESENT NRZ STATUS ON DRIVE READ CONNECTOR	
	OFF FOR DUAL DENSITY 9 TRACK DRIVES THAT DO PRESENT NRZ STATUS ON DRIVE READ CONNECTOR	
8	ON FOR 7 TRACK DRIVES	
	OFF FOR 9 TRACK DRIVES	

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		western peripherals ANAHEIM, CALIFORNIA	
±	±	±	
APPROVALS	DATE		
DRAWN T.M.	2-15-78		
CHECKED N.D.	5-16-78		
SCALE	SIZE	DRAWING NO.	
		B 122036	
DO NOT SCALE DRAWING			
SHEET 1 OF 3			







- ⑥ MARK CHARACTERS SHOWN (A&V) ON SIDE OF CONNECTOR USING CONTRASTING INK.
- ⑤ FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS, REF J.O.A. & SCHEMATIC
- ④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR AND DASH NO. (IF REQD)
APPROX WHERE SHOWN (FAR SIDE)
- 3.
- 2. FOR MATERIAL SEE P/L NO. 122037
- 1. REF SCHEMATIC 122036
- NOTE: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO.-0143	1-18-77	
B	E.C.O. NO.-0190	6-3-77	N.D. 6-11-77
	RECORD CHANGE: ADD CONF. "L" (REV. LTR. CHANGE NOT REQD.)	8-9-77	N.D. 8-9-77
	RECORD CHG: ADD CONF "N" (REV LTR CHG NOT REQD)	9-18-77	N.D. 9-28-77
	RECORD CHG: ADD SH NO. 2 (CLASSIFY AND CHG TO BASIC BD SEE ECO # 0254 (NO REV LTR REQD))	10-14-77	N.D. 10-14-77
	ECO # 299 (NO REV. LTR. CHANGE)	3-8-78	N.D. 3-18-78
C	USE "F" REV. PWB, REF. ECO N. 236A	5-16-78	TABL CHAPMAN N. 5-16-78
D	DELETED NOTES 3 & 6 PER ECO 111	11-12-78	N.D. 11-12-78
E	CORRECT VALUE SHOWN FOR CAPACITOR PER ECO No. 460	3-26-79	P.CHAPMAN 28 A. 9. 6. 79
F	ADDED NOTE ⑤ PER ECO # 504	6-20-79	447 C. 20-79

G IC "H" S/B 74520 ECO 806

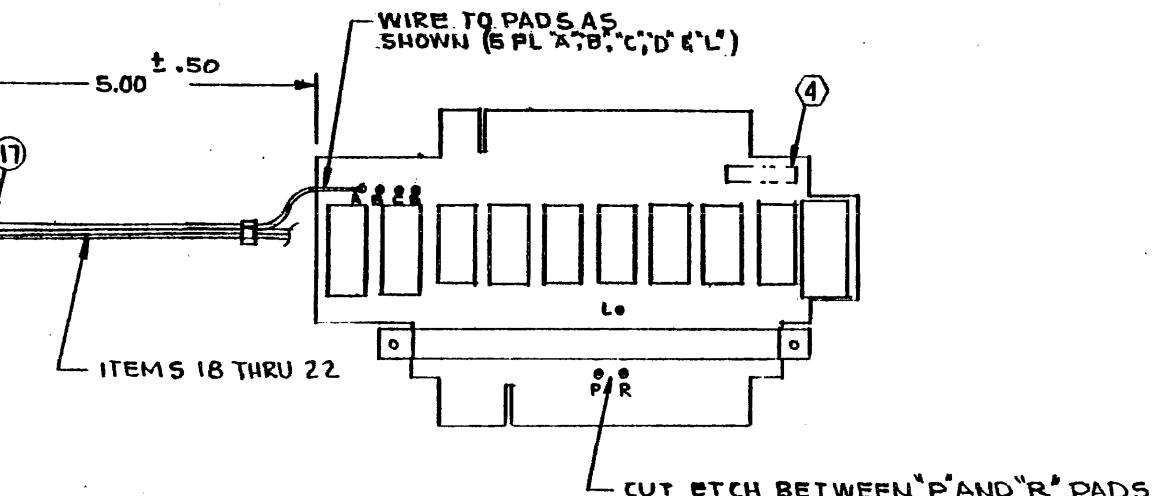
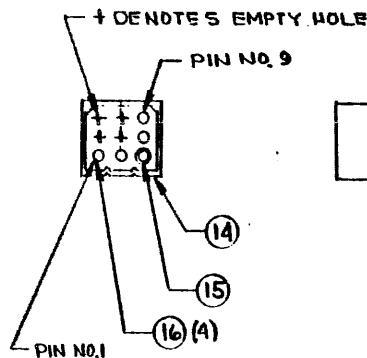
BASIC ASSY SHOWN
FOR -1 ASSY SEE SH NO. 2

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES			western peripherals ANNHEIM, CALIFORNIA		
±	±	±	APPROVALS	DATE	
DRAWN CORUM	11-6-76		CHECKED N.D.	12-16-76	SCALE FULL
					SIZE B
					DRAWING NO. 122037
DO NOT SCALE DRAWING					
SHEET 1 OF 2					

0	3	YEL	(A)	122037-1
1	6	RED	(B)	
2	9	GRN	(D)	
3	2	ORG	(C)	
COM	1	BRN	(L)	

122037-1 WIRING DIAGRAM

ITEM NO.14
(9 PIN MOLEX PLUG, REF)



NOTE:

THE -1 ASSY IS USED ON PERTEC T9000 SERIES
WITH OPTIONAL UNIT SELECT THUMBWHEEL SWITCH
TERMINATED IN MOLEX CONNECTOR. COMPONENT
REQUIREMENTS & MARKINGS ARE THE SAME AS
FOR BASIC ASSY

-1 ASSY SHOWN
FOR BASIC ASSY SEE SH NO.1

TOLERANCES UNLESS
OTHERWISE SPECIFIED
FRACTIONS DEC. ANGLES
 \pm \pm \pm

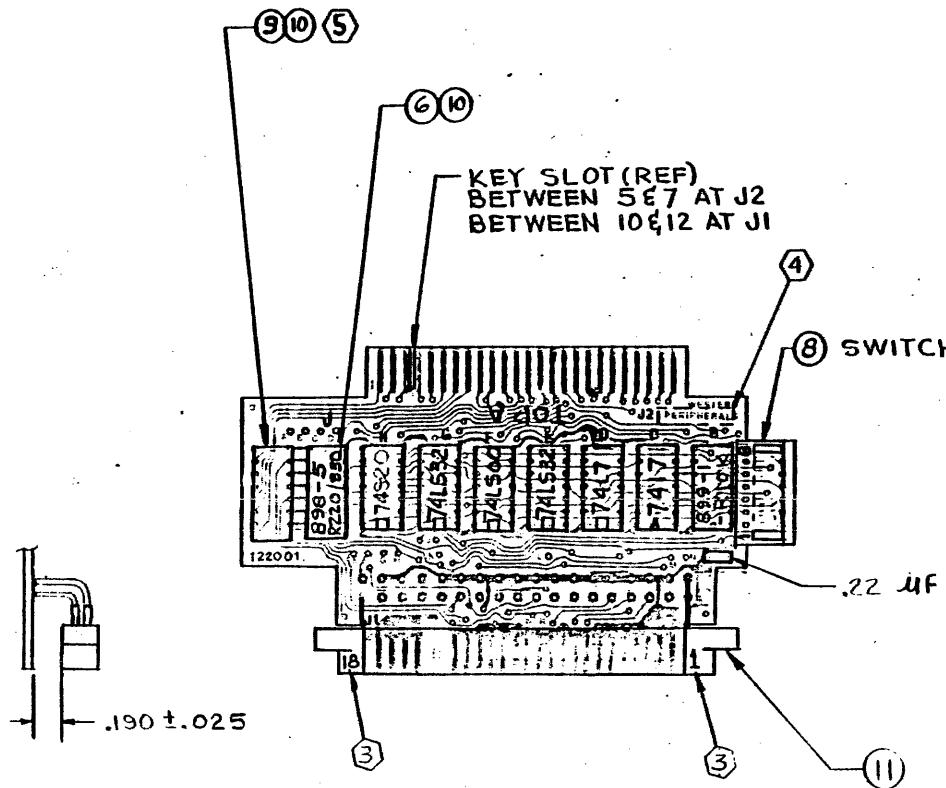
western peripherals
ANAHEIM, CALIFORNIA

ASSEMBLY— ADAPTER
TAPE CONTROL CONNECTOR

APPROVALS	DATE
DRAWN COPUM	11-19-77
CHECKED	

SCALE SIZE DRAWING NO.
FULL B 122037

DO NOT SCALE DRAWING SHEET 2 OF 2



8. FOR CONFIGURATION "S" SEE DWG. 112001
 7. FOR CONFIGURATION "N" SEE DWG. 122044

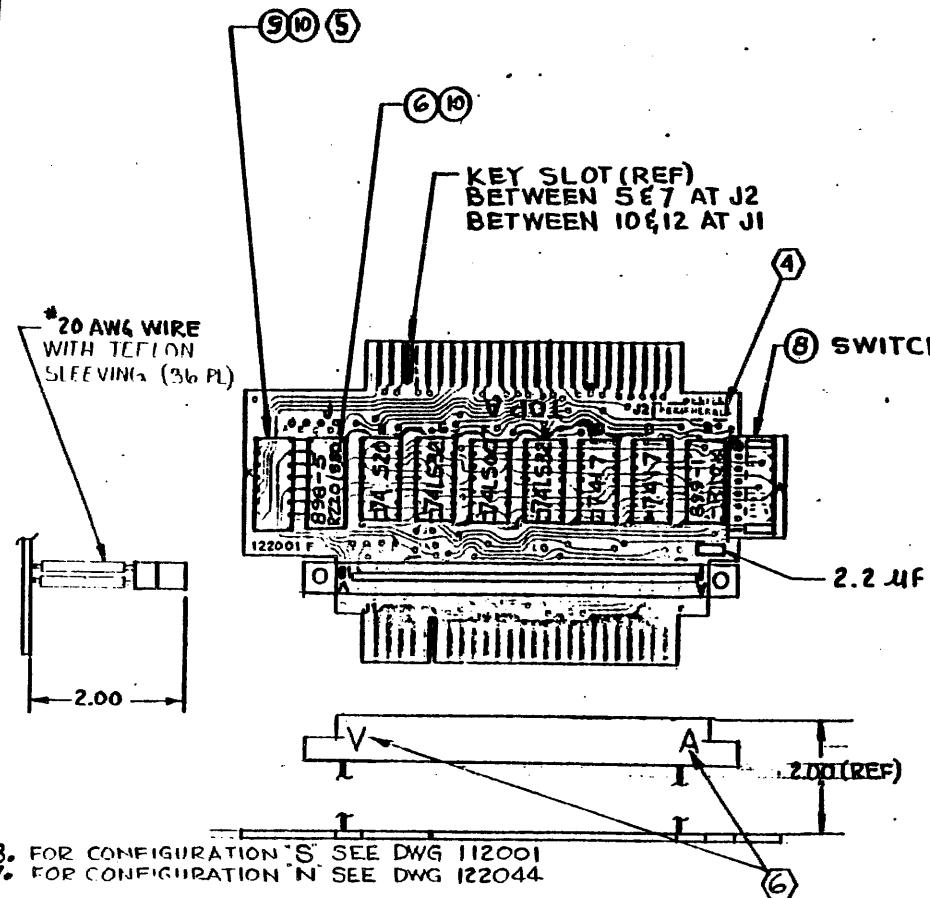
6.

- ⑤ FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS,
 REF J.O.A. & SCHEMATIC
 ④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR LOCATED
 APPROX WHERE SHOWN (FAR SIDE)
 ③ RUBBER STAMP CHARACTER SHOWN USING WHITE INK
 2. FOR MATERIAL SEE P/L NO. 122038
 1. REF SCHEMATIC 122036
 NOTE: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO. -0143	1-18-77	
B	E.C.O. NO. -0190	6-3-77	N.D. 6-11-77
C	E.C.O. NO. -0197	8-8-77	N.D. 8-9-77
D	E.C.O. NO. -299 (NO REV. LTR. CHG.)	3-8-78	N.D. 3-11-78
E	ADDED NOTE 7 PER E.C.O. 257 AND DELETED REQUIREMENT FOR SLEEVING WIRE AT CONNECTOR.	3-21-78	N.D. 3-11-78
F	REVISED NOTE 3 PER E.C.O. 355	4-2-78	
G	DELETED NOTE 6 PER E.C.O. 414	4-2-78	
H	CHANGED I.C. AT LOC H PER E.C.O. 806	10-9-80	
	INC ECO NO. 852	7-13-81	

1120 27 1981

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		western peripherals ANAHEIM, CALIFORNIA	
±	±	±	
APPROVALS	DATE	ASSEMBLY: ADAPTER TAPE CONTROL CONNECTOR 90° MOUNTING	
DRAWN CORUM	11-8-76	SCALE	SIZE DRAWING NO.
CHECKED J.D.	12-16-76	FULL	B 122038
		DO NOT SCALE DRAWING	
		SHEET 1 OF 1	



- ⑥ MARK CHARACTERS SHOWN (A&V) ON SIDE OF CONNECTOR USING CONTRASTING INK.
- ⑤ FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS, REF J.O.A. & SCHEMATIC
- ④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR LOCATED APPROX WHERE SHOWN (FAR SIDE)
- 3.
- 2. FOR MATERIAL SEE P/L NO. 122039
- 1. REF SCHEMATIC 122036
- NOTE: UNLESS OTHERWISE SPECIFIED

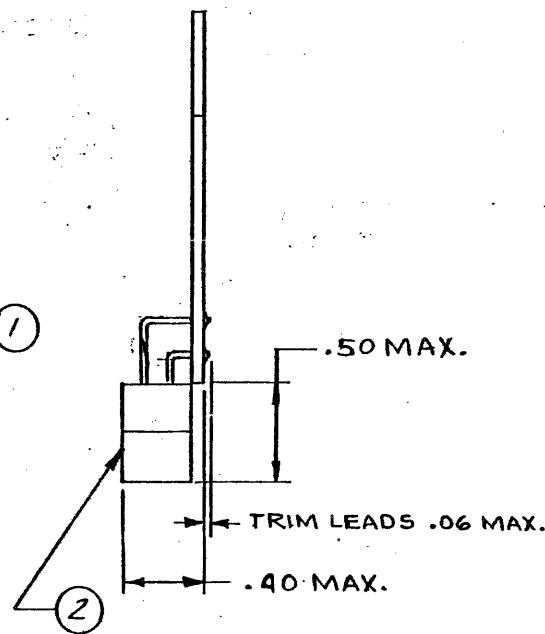
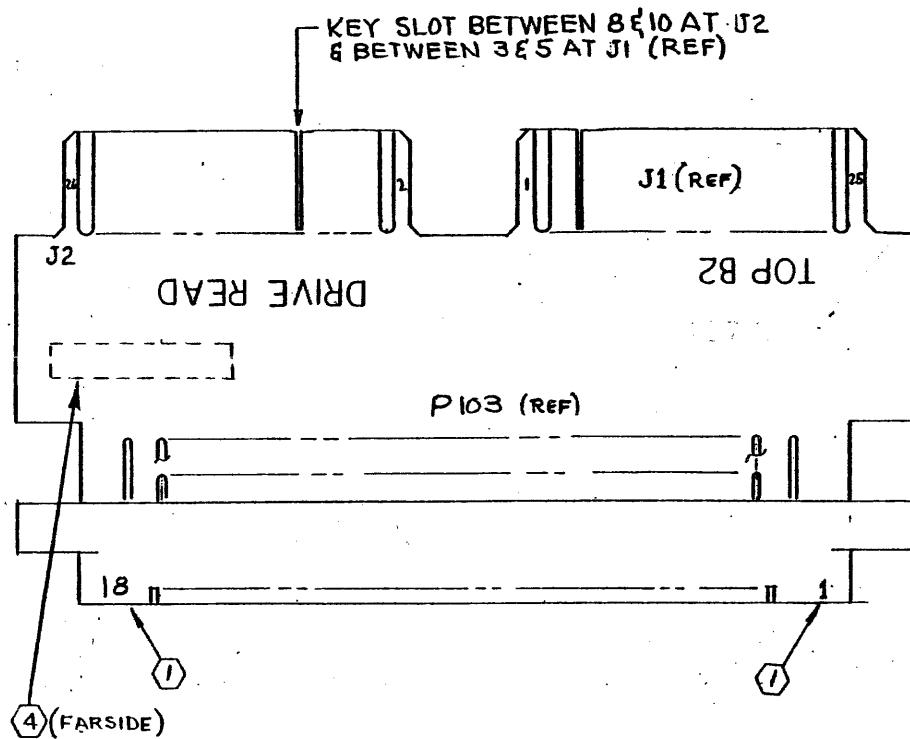
REVISIONS			
LIN	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO.-0143	1-18-77	
B	E.C.O. NO.-0190	6-3-77	N.D. H-11
C	E.C.O. NO.-0197	8-8-77	N.D. 8-9-77
D	E.C.O. NO-299 (ND REV. LTR. CHG.)	3-8-78	N.D. 3-21-78
	ADDED NOTE 7. PER E.C.O. 257	3-21-78	N.D. 3-21-78
D	USE F REV.PWB, REF. ECO No. 236A	5-16-78	PULCHERAN N.D. 5-16-78
E	DELETED NOTES 3 & 6 PER ECO 914	1-11-79	N.D. 1-11-79
F	ADDED NOTE ⑥ PER ECO# 504	6-20-77	N.D. 6-20-77
G	I.C. "H" S/B 7452D	ECD 806	

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		
\pm	\pm	\pm
APPROVALS	DATE	
DRAWN CORO M	11-8-76	
CHECKED V.D.	12-16-76	
SCALE	SIZE	DRAWING NO.
FULL	B	122039
		DO NOT SCALE DRAWING
		SHEET 1 OF 1

western peripherals
ANAHEIM, CALIFORNIA

**ASSEMBLY: ADAPTER
TAPE CONTROL CONNECTOR
2 INCH STAND OFF**

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REVISED NOTE 1 PER E.C.O. #355	Jul 26/79	W.H. 2-9-79
B	ADVANCED REV LTR TO AGREE WITH P/L	Jul 26/79	3-12-79
C	REVISED PER E.C.O. #417	Jul 26/79	4-17-79
D	INC ECO NO. 852	Mar 3-12-81	3/24/81 (K.L. 202)

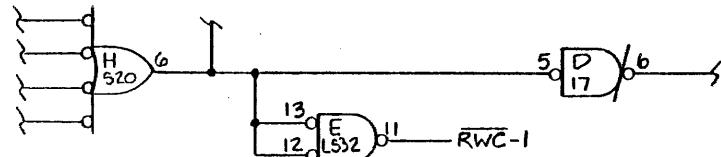


MAR 27 1981

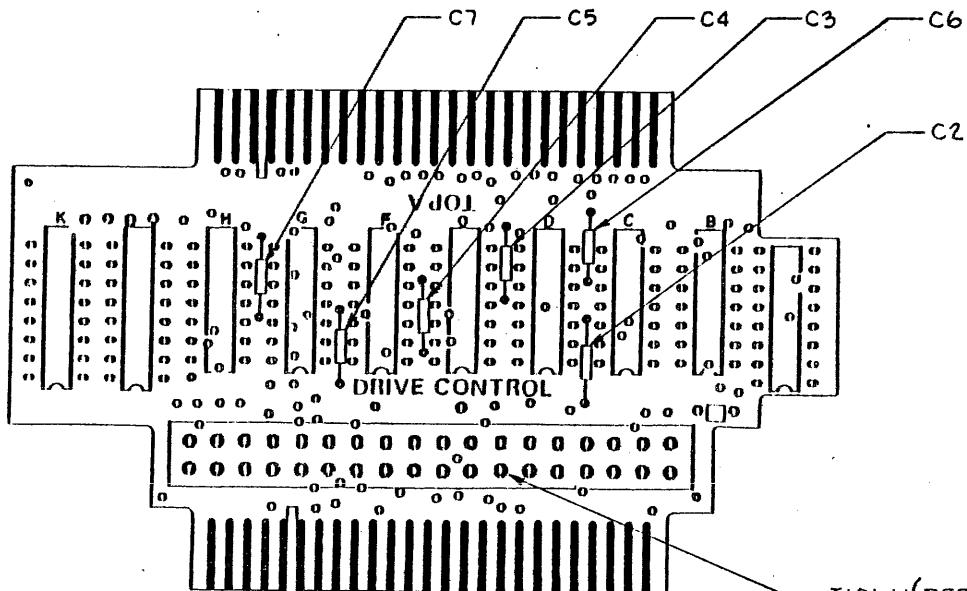
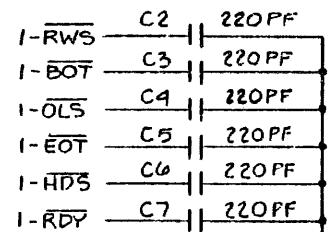
- ④ RUBBER STAMP ASSY. NO. WITH LATEST KEY LTR APPROX. WHERE SHOWN.
 - 3. SEE P/L 122043.
 - 2. REF. SCHEMATIC DWG NO. 122022.
 - ① RUBBER STAMP CHARACTERS SHOWN WITH WHITE INK.
- NOTE : UNLESS OTHERWISE SPECIFIED.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		
±	±	±
APPROVALS	DATE	western peripherals ANAHEIM, CALIFORNIA
DRAWN <i>[Signature]</i>	6-11-77	ASSEMBLY-ADAPTER, TAPE READ, REVERSE IMAGE, 90°
CHECKED <i>[Signature]</i>	6-11-77	SCALE
		SIZE DRAWING NO.
		2 X B 122043
DO NOT SCALE DRAWING SHEET 1 OF 1		

CONFIGURATION "N" CONTROL ADAPTER BOARD



CAP DESIG.	FROM	TO	TERM
C2	D3	GND	RWS
C3	D11		BOT
C4	F1		OLS
C5	G1		EOT
C6	F9		HDS
C7	G13	GND	RDY



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REDRAWN PER E.C.O. 231	10-27-77	
B	REVISE PER E.C.O. 257	3-21-78	
C	REVISE PER E.C.O. 236-A	5-16-78	
D	DELETE REWORK FOR "D" REV PWB PER E.C.O. 781	10-15-80	KR
E	CHANGED I.C. LOC "H" PER ECO 806	12-9-79	LM

REWORK INSTRUCTIONS: (REF ASSY'S 122037, 122038 & 122039)

- 1) MODIFY CIRCUIT
 - A. CUT ETCH (SOLDER SIDE) AT J101-H
 - B. JUMPER F5 TO E12 & E13 (SOLDER SIDE)
 - C. JUMPER E11 TO J101-H (SOLDER SIDE)
- 2) COMPONENT ADDITION & MARKING
 - A. ADD (6) 220PF CAPACITORS (C2 THRU C7) AT LOCATIONS SHOWN
 - B. IDENTIFY AS "CONF N" AT ASSY NUMBER USING BLACK INK
- 3) THIS MOD PROVIDES ISOLATION & FILTERING FOR ADAPTER ELECTRONICS
- 4) MATERIAL REQUIREMENTS:
 - A. (1 REQ) BOARD ASSY. AS NOTED IN PROCEDURES ABOVE
 - B. (6 REQ) 220PF CAPACITORS (WP15000185)
- 5) VERIFY PROPER CAPACITOR INSTALLATION BY PERFORMING CONTINUITY CHECK PER THE CAPACITOR INSTALLATION CHART
- 6) REF. SCHEMATIC 122036
- 7) APPLICABLE TO "F" (OR LATER) REV PWB ONLY. TO RETROFIT OLDER ASSEMBLIES WITH "D" REV PWB, REFER TO "C" REV HISTORY COPY OF THIS DRAWING

DEC 24 1980

TOLERANCES UNLESS OTHERWISE SPECIFIED			western peripherals™ TUSTIN, CALIFORNIA		
FRACTIONS	DEC	ANGLES	APPROVALS	DATE	
±	±	±	DRAWN BY A. M. ECKER	10-16-80	
CHECKED E. M. ECKER				10-16-80	
			SCALE	SIZE	DRAWING NO.
				B	122044
				DO NOT SCALE DRAWING	SHEET 1 OF 1

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9-15-80	<i>[Signature]</i>

PURPOSE: TO PROVIDE START-UP AT 1600 B.P.I.

In order to initialize in the 1600 B.P.I. mode of operation, PROM's U45 and U56 in the upper-left corner of the Control Board must be of the proper type. A jumper must be installed.

1. The Prom Part Numbers can be 754013810 and 754013811 with revision levels of "G" or higher, or they may have part numbers beginning with 154 with any revision level.
2. A jumper must be installed between Pads "BP" and "BR" which are located below the PROMs and directly above U55.
3. After modification, install an adhesive label inside the front panel of the drive near the upper reel motor and Cipher label. The adhesive label should read: "Modified per Western Peripherals Configuration "A", Dwg. 79000410.

TAPE DRIVE MODIFICATION

SEP 15 1980

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES \pm \pm \pm		 western peripherals™ TUSTIN, CALIFORNIA	
MODIFICATION DRAWING - CIPHER 900X, CONFIGURATION "A"			
APPROVALS DRAWN H. DEUTSCH	DATE 9-15-80	SCALE	SIZE A
CHECKED <i>D. Shultz</i>	9-15-80		DRAWING NO. 79000410
		DO NOT SCALE DRAWING	
		SHEET 1 OF 1	

REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12-30-80	<i>[Signature]</i>

PURPOSE: TO ELIMINATE WRITE AND/OR READ ERRORS WHEN TAPE IS AT B.O.T. AND DRIVE IS OFF-LINE.

When Cipher 900X Tape Drives are received from vendor, they have the jumpers set in such a way that if the drive is off-line and at B.O.T., the computer receives a tape unit ready status and Write/Read errors are detected if the CPU attempts any Write/Read operation.

1. To prevent the above from happening, remove jumper BD to BC and install jumper BA to BB located in the vicinity of IC U52 on the Control/Servo PCB of the Cipher 900X type drive.
2. After modification, install an adhesive label inside the front panel of the drive near the upper reel motor and Cipher label. The adhesive label should read: Modified per Western Peripherals Configuration "B", Dwg. 79000642.
3. Reference Cipher Control/Servo Schematic 355012-300.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES \pm \pm \pm			 western peripherals™ <small>TUSTIN, CALIFORNIA</small>		
MODIFICATION DRAWING - CIPHER 900X, CONFIGURATION "B"					
APPROVALS	DATE	SCALE	SIZE	DRAWING NO.	
DRAWN <i>H. L. Lewis</i>	12-30-80		A	79000642	
CHECKED <i>H. L. Lewis</i>	12-30-80			DO NOT SCALE DRAWING	
				SHEET 1 of 1	

NOTES

INSTALLATION CHECKLIST - CIPHER 100X

1. Open carton.
2. Turn over and lift off carton.
3. Remove corner pads.
4. Open inner carton.
5. Turn over and lift off carton from drive.
6. Locate manual and mounting hardware.
7. Inspect the drive - Contact the carrier if any concealed shipping damage is discovered.
8. On some cabinets, a mounting frame is required to mount the drive because the door swings against the edge of the cabinet. Mount the extender frame at the appropriate location in the cabinet. Be sure the hinge holes are on the correct side.
9. Refer to the tape drive manual.
10. Mount the tape drive hinges at an appropriate location on the cabinet. Place the longer hinge at the top. Place nylon washers on hinge pins.
11. Place drive on its back and remove screw from shipping frame.
12. Mount drive on hinges and secure with hinge safety block.
Secure drive latch.